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TOWARDS THE KNOWING
ORGANISATION: AN
INVESTIGATION INTO THE
INFORMATION BEHAVIOUR OF
TRAINEE SOLICITORS WITHIN A
LAW FIRM ENVIRONMENT

SHONA MARGARET MCTAVISH

PhD

May 2007

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SHONA MARGARET MCTAVISH

A thesis submitted as partial fulfilment
of the requirements of the University of
Northumbria at Newcastle for the
degree of Doctor of Philosophy

Research undertaken in the School of
Computing, Engineering and
Information Sciences

May 2007

ABSTRACT

This PhD study was designed to characterise the nature and role of the information behaviour of trainee solicitors in the context of knowledge development within a law firm environment. The characterisations drawn and the propositions offered provide a deeper understanding of the information behaviour of trainee solicitors, and, of the relationship between information behaviour, knowledge behaviour and knowledge development.

A constructivist approach to inquiry was adopted, where the research design emerged through 'doing'. As emergent design is unusual within Library and Information Science (LIS) an in-depth discussion of how the design emerged is included within this thesis. Six trainees formed the sample for the final presentation of the findings. The adoption of a narrative technique for the gathering of data, and the presentation of the analysis, taking a cross-trainee and cross-theme approach, enabled holistic, in-depth characterisations to be drawn. The themes emerged through an iterative process of analysis and were followed up through a review of the literature. Undertaking a more comprehensive literature review after data collection is a characteristic of the constructivist inquiry but is a unique approach within LIS research.

Through the consideration and interpretation of the characterisations that emerged from the findings this research posits a set of theoretical propositions and practical solutions pertaining to the knowledge behaviour (incorporating information behaviour) and knowledge development of the trainee solicitors. These propositions alongside the practical solutions offered are transferable in that they can be taken by other firms or organisations and considered in relation to their own setting. In addition, a model depicting the knowledge behaviour and its role in the knowledge development of trainee solicitors is presented.

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In loving memory of my mother, Isabella Margaret McTavish, my father, Alastair Cairns McTavish and my brother, Richard Charles McTavish

Declaration

I declare that the work contained in this thesis has not been submitted for any other award and that it is all my own work.

Name: Shona McTavish

Signature:

Date: 17/7/07

1. Introduction

The aim of this research was to characterise the nature and role of the information behaviour of trainee solicitors in the context of knowledge development within a law firm environment.

An initial review of the literature in preparation for PhD registration indicated that while a great deal of research had been carried out within the fields of Library and Information Science and Knowledge Management, consideration of the relationship between information behaviour and knowledge appeared to be scarce. Literature within Knowledge Management recognises knowledge as a source of competitive advantage (Chourides, Longbottom and Murphy, 2003:29; Koskinen, 2003:67; Wagner, 2003:97; Beckett, Wainwright and Bance, 2000:601; Beijerse, 1999:94), and suggests that in order to capitalise on the knowledge held within organisations, that there is a need to consider methods of exploiting that knowledge (Beckett, Wainwright & Bance, 2000:601). This suggests a need for methods that enable the identification, capturing, sharing and usage of that knowledge. And, in considering definitions of knowledge within the literature, it was quickly identified that knowledge and information were in some way connected. Furthermore, as information behaviour is concerned with the concepts of 'information need', 'information seeking', 'information exchange' and 'information use' (Wilson & Walsh, 1996:4) then it was considered that information behaviour would therefore have some relevance to the identification, capturing, sharing and usage of knowledge. To-date no research has been identified that discusses the contribution of the information behaviour theory and practice to the identification, capturing, sharing and usage of knowledge within knowledge management theory and practice.

1.1 The law firm environment

Within the context of law firms, Edwards and Mahling (Gottschalk, P, 2000) categorise the types of information involved in the practice of law as administrative data, declarative knowledge, procedural knowledge and analytical knowledge. Administrative data includes information about firm operations, for

example, hourly billing rates for lawyers, and client names and matters. Declarative knowledge is knowledge of the law, the legal principles contained in statutes, court opinions and other sources of primary legal authority. Procedural knowledge is knowledge of the mechanics of complying with the law's requirements in a particular situation, and analytical knowledge is the conclusion reached about the course of action a particular client should follow in a particular situation. This categorisation of practice within law firms clearly indicates that law firms are both intensive users of information and of knowledge and are well suited for knowledge and information behaviour investigation. Furthermore, law firms have always been pure knowledge businesses, always conscious of the fact that their sustainable advantage is the expertise and knowledge of their lawyers (Parsons, 2004:4), and therefore how lawyers develop their knowledge in practice is likely to be of interest.

Within this study trainee solicitors have been selected for the purpose of investigation. Trainee solicitors are working under a training contract, the final stage of the process of qualification as a solicitor. The purpose of the training contract is to give the trainees supervised experience in legal practice through which they can refine and develop their professional skills (Law Society, 2005:3). The trainees are therefore ideal participants for research of this nature as they are by the very nature of their training contract, learners, and through an exploration of the work that they are given to undertake this research can explore how the trainees develop their knowledge and how their information behaviour contributes to that learning. Through an investigation of the information behaviour of trainee solicitors and how this behaviour shapes their knowledge development a law firm could be better placed to consider enablers and inhibitors to learning, and to consider methods that better enable the trainees to develop their knowledge, knowledge being recognised as a law firm's sustainable advantage.

1.2 Methodology

The nature of this research was exploratory and descriptive and suggested the need for a qualitative approach, and for methods that enabled the gathering of

sufficient data to present a detailed description of the trainees' behaviour in context, and the interpretation of that description if the research aim was to be achieved. Only the trainees are in a position to provide an insight into their behaviour from their perspective, and therefore there was a need to adopt an approach that enabled an exploration of their experiences within the context of their work environment, what it is that they do, how do they approach whatever it is that they do, and why have they taken that approach. Naturalistic studies focus on viewing experience from the perspective of those involved, to understand why they behave as they do (Mellon, 1990:3). This research has therefore adopted the naturalistic inquiry, now known as constructivist inquiry, approach of Lincoln and Guba (1985).

A narrative technique was used for the gathering of data, 'narrative is the primary form by which human experience is made meaningful' (Polkingthorne, 1988:1) and in line with Stake (1995:39) qualitative research uses these narratives to 'optimise the opportunity of the reader to gain an experiential understanding' of the focus of study. Furthermore, followers of the constructivist paradigm recognise that realities can be multiple and as such any chosen technique needs to enable these to emerge. By taking a narrative approach 'the agenda is open to development and change, depending on the narrator's experiences' (Holloway & Jefferson, 2000:31), and therefore fits within the axioms of the constructivist paradigm.

The second reason for adopting a constructivist approach was to produce theory that emerges from the data; that was grounded in the data. Theory is not generated a priori, rather it is inductively derived from the study of the phenomenon it represents, and the generation and development of concepts, categories, and propositions is an iterative process (Pandit, 1996:2). In line with a constructivist approach to inquiry, the design emerges, it flows, cascades and unfolds, the guiding substantive theory emerges from the data, is grounded in the data, and meanings and interpretations are negotiated with participants (Lincoln & Guba, 1985). The narratives provide the thick descriptions necessary for transferability and a sufficient base to permit a person contemplating application in another setting to make the needed comparisons of familiarity (Lincoln &

Guba, 1985:359). This research focused on six trainee solicitors within a single law firm, across two seats (departments) of training over a period of two years and provides an insight into their individual information behaviour and how this information behaviour contributed to their knowledge development. Through the iterative process of individual and cross trainee analysis, coding concepts, categories, and characterisations emerged, and provided the basis for theoretical propositions to be made. Chapter 2 provides a more in-depth exploration of the constructivist approach to inquiry and how it was adapted for the purposes of this research, providing an insight into the research journey and how this journey shaped both the approach and outcomes of this research.

1.3 Literature Review

The adoption of a constructivist approach to inquiry requires that there is no a priori theory; that the theory should emerge from the data. A comprehensive literature review is not, therefore, carried out prior to entering the field. ‘Naturalistic (*constructivist*) inquiry is best learned through experience’ and ‘while some researchers may approach naturalistic inquiry with a literature review and a carefully constructed framework, those who focus on understanding a phenomenon from the perspective of its participants generally do not’ (Mellon, 1990:23, italics added).

With the exception of an initial review of the literature being carried out in preparation for PhD registration, a more comprehensive review of the literature was not carried out prior to entering the field for data collection. It was through the iterative process of analysis of the data collected that themes emerged, and as a result of this process the literature was then explored in relation to these themes. This method of exploration also led to the researcher to consider and question the findings from the literature which in turn led to the identification of further areas to be explored.

1.3.1 Knowledge Management and Learning

As the aim of this research was to characterise the nature and role of the information behaviour of trainee solicitors in the context of knowledge development within a law firm environment, a review of knowledge within knowledge management literature was considered important in informing the framework for this research. Knowledge, as highlighted above, has been identified as a source of competitive advantage, and it is suggested that how knowledge is developed will therefore be of relevance to the law firm. Furthermore, in considering knowledge development, there is a need to consider theory surrounding learning. Much of the literature surrounding knowledge management focuses on organisational as oppose to individual learning. As this research is exploring the knowledge development of the individual trainees, then it is useful to consider how individuals learn. 'Learners construct their own knowledge from their experiences' (Doolittle, 1999:2). Through the iterative process of analysis, emerging themes identified as pertaining to the debate surrounding knowledge and learning are discussed and developed in Chapter 3.

For example, early in the iterative process of analysis it became clear that there was a need to consider the relationship between knowledge and information. This led to an exploration of the debate surrounding knowledge, and whether and how it differed from information. This was important in enabling a working definition for each to be reached so that any distinctions could be made in interpreting the trainees' narrations. This also proved important in developing an argument as to the value of considering information behaviour in relation to knowledge development as discussed below.

As the trainees were undertaking a training contract within the firm, the purpose which, as noted above, is to give the trainees supervised experience in legal practice through which they can refine and develop their professional skills (Law Society, 2005:3), knowledge development was highly likely to, and indeed did, emerge as a key theme. In considering this theme in relation to the research aim it became clear that there was a need to explore how individuals learn and this led to an exploration of work-based learning and how individuals approach

learning. It was posited that through an exploration of the factors that shape a trainees' learning the firm would be better able to understand potential enablers and inhibitors to learning, and therefore, their knowledge development.

1.3.2 Information Behaviour

In order to examine the role of information behaviour in knowledge development a framework was required to further understanding and to guide the research in the interpretation of the information behaviour emerging phenomena. Issues surrounding information behaviour along with selected models of information seeking behaviour are discussed in Chapter 3. This discussion is based on, for example, work by Jarvelin and Ingwersen (2004), Kuhlthau (2004, 1993, 1991), Leckie, Pettigrew and Sylvain (1996), Vakkari (2003, 2001), Wilkinson, (2001), Wilson (1981, 1999) and Wilson and Walsh (1996) and provides an insight into the multidisciplinary nature of information behaviour phenomena, and the range of intervening factors suggested as influencing an individual's information behaviour.

There has been very little published research on the information behaviour of solicitors (Leckie, Pettigrew & Sylvain, 1996:173, Wilkinson, 2001:257). This lack of research has directed this study towards models that have been found to consider the information seeking of lawyers, and that were further considered to fit with the research paradigm of this study. Leckie Pettigrew and Sylvain's (1996) analytic model of the Information Seeking Behaviour of Professionals was identified and selected as an initial framework base. This model has been used as an aid to research in relation to the information seeking behaviour of students studying law (Kerins, Madden & Fulton, 2004), and has been brought into question by Wilkinson (2001), in relation to her empirical study of the information sources used by lawyers in problem-solving. Kuhlthau's (1991) Information Search Process model was selected as it has not only been empirically tested with various groups of professionals, including a small group of lawyers, but also draws attention to affective factors, the feelings associated with each stage of the process, an element identified as missing from Leckie, Pettigrew and Sylvain's model, but an element that emerged through the iterative

process of analysis of the trainees' narratives. In addition, whereas Leckie, Pettigrew and Sylvain provide a general model of the broad elements identified as depicting the information seeking behaviour of professionals, such as roles, tasks, etc, Kuhlthau provides a more contextual and individual approach. Kuhlthau presents information seeking 'as a process of construction, with uncertainty decreasing as understanding increases, incorporating the cognitive with the affective experience common in the process of information seeking and use' (Kuhlthau & Tama, 2001:27), thereby adding contextual depth to this study's framework. Although these models are mainly concerned with information seeking as oppose to information behaviour, both models consider the influence of tasks on information need, seeking, and use, and therefore provide an informative base from which to consider the findings of this research.

1.4 Aims and Objectives

This research presents a cross-theme analysis of six trainee solicitors, providing thick characterisations of their information behaviour in context. This research also presents how this behaviour contributed to the trainees' knowledge development, and how, through their behaviour and knowledge development as a result of this behaviour, the firm is better able to consider methods that better enable learning.

The following aims and objectives were established as an aid in guiding the focus of this research inquiry. Although the research aim and the research question remain the same, objective four as a result of the nature of a constructivist inquiry, where the design emerges, flows, cascades and unfolds (Lincoln & Guba, 1985), has changed in relation to the time period presented in the research. The trainees were investigated over two years but due to their inability to attend four interviews, and, as a result of the iterative process of analysis, two seats of training were identified for the final presentation of the findings. This change is reflected upon and discussed within Chapter 2 on Methodology.

Aim

To characterise the nature and role of the information behaviour of trainee solicitors in the context of knowledge development within a law firm environment.

Objectives

1. To explore and review current debate on Knowledge.
2. To explore and review literature on Learning.
2. To explore and review current debate on Information Behaviour.
3. To identify and examine the conditions which influence information behaviour and knowledge development.
4. To investigate and model the information behaviour of trainee solicitors over a two year period within the context of their work environment.
5. Through the investigation and modelling of the information behaviour of trainee solicitors consider the trainees' methods of knowledge development.
6. Through a consideration of the trainees' methods of knowledge development as a result of their information behaviour provide an insight into potential enablers and inhibitors to learning.

References

Beckett, A. J., Wainwright, C. E. R. and Bance, D. (2000). 'Knowledge management: strategy or software?', *Management Decision*, 38 (9), pp. 601-606.

Beijerse, R. P. (1999) 'Questions in knowledge management: defining and conceptualising a phenomenon', *Journal of Knowledge Management*, 3 (2), pp. 94-109.

Chourides, P., Longbottom, D. and Murphy, W. (2003) 'Excellence in knowledge management: an empirical study to identify critical factors and performance measures', *Measuring Business Excellence*, 7 (2), pp. 29-45.

Doolittle, P. E. (1999) 'Integrating constructivism & cognitivism', [Available at: <http://edpsychserver.ed.vt.edu/research/icc.html>] (Accessed 17th March 2007).

Gottschalk, P. (2000) 'Use of IT for knowledge management in law firms', *The Journal of Information, Law and Technology*, [Available at: (<http://www.law.warwick.ac.uk/jilt/99-3/gottschalk.html>)] (Accessed: 19th June 2001).

Holloway, W. & Jefferson, T. (2000) *Doing qualitative research differently: free association, narrative and the interview method*. Sage Publications.

Jarvelin, K. and Ingwersen, P. (2004) 'Information seeking research needs extension towards tasks and technology', *Information Research*, 10 (1) paper 212 [Available at: <http://InformationR.net/ir/10-1/paper212.html>] (Accessed 15th March 2007).

Kerins, G., Madden, R. and Fulton, C. (2004) 'Information seeking and students studying for professional careers: the cases of engineering and law students in Ireland', *Information Research*, 10 (1), paper 208. [Available at <http://InformationR.net/ir/10-1/paper208.html>] (Accessed: 8th August 2005).

Koskinen, K. U. 'Evaluation of tacit knowledge utilisation in work units', *Journal of Knowledge Management*, 7 (5), pp. 67-81.

Kuhlthau, C. C. (2004) *Seeking meaning: a process approach to library and information services*. 2nd ed. Libraries Unlimited.

Kuhlthau, C. C. (1993) *Seeking meaning: a process approach to library and information services*. Ablex Publishing Corporation.

Kuhlthau, C. C. (1991) 'Inside the search process: information seeking from the user's perspective', *Journal of the American Society for Information Science*, 42 (5), pp. 361-371.

- Kuhlthau, C. C. and Tama, S. L. (2001) 'Information search process of lawyers: a call for 'just for me' information services', *Journal of Documentation*, 57 (1), pp. 25-43.
- Law Society (2005) *Training trainee solicitors: The Law Society requirements*. The Law Society.
- Leckie, G. J., Pettigrew, K. E. and Sylvain, C. (1996) 'Modelling the information seeking of professionals: a general model derived from research on engineers, health care professionals and lawyers', *Library Quarterly*, 66 (2), pp.161-193.
- Lincoln, Y. S. and Guba, E. G. (1985) *Naturalistic inquiry*. Sage Publications.
- Mellon, C. A. (1990) *Naturalistic inquiry for library science: methods and applications for research, evaluation and teaching*. Greenwood Press.
- Pandit, N. R. (1996) 'The creation of theory: a recent application of the grounded theory method', *The Qualitative Report* 2 (4). [Available at: <http://www.nova.edu/ssw/QR/QR2-4/pandit.html>] (Accessed: 21st December 2005)
- Parsons, M. (2004) *Effective knowledge management for law firms*. Oxford University Press.
- Polkingthorne, D. E. (1988) *Narrative knowing and human sciences*. SUNY Press.
- Stake, R. E. (1995) *The art of case study research*. Sage Publications.
- Vakkari, P. (2003) 'Task-based information searching', *Annual Review of Information science and Technology*, 37, pp. 413-464.

Vakkari, P. (2001) 'Task complexity, problem structure and information actions; integrating studies on information retrieval', *Information Processing & Management*, 35 (6), pp. 819-837.

Wagner, B. A. (2003) 'Learning and knowledge transfer in partnering: an empirical case study', *Journal of Knowledge Management*, 7 (2), pp. 97-113.

Wilkinson, M. A. (2001) 'Information sources used by lawyers in problem solving: an empirical exploration', *Library and Information Science Research*, 23, pp. 257-276.

Wilson, T. D. (1999) 'Models in information behaviour research', *Journal of Documentation* 55 (3), pp. 249-270.

Wilson, T. D. (1981) 'On user studies and information needs', *Journal of Documentation*, 37 (1), pp. 3-15.

Wilson, T. D. and Walsh, C. (1996) *Information behaviour: an interdisciplinary perspective. A review of the literature*. British Library Research and Innovation Centre. (British Library Research and Innovation Report no. 10).

2. Methodology

2.1 Purpose of Research

The purpose of this research was, through the generation of theory grounded in the data, to characterise the information behaviour of trainee solicitors in the context of their work environment and through a consideration of their information behaviour provide an insight into any potential enablers and inhibitors to their knowledge development.

This implied the need for a holistic approach to inquiry, an approach that catered for the differing potential realities of individuals within the context of their work environment. In order to generate theory it was necessary to interpret and re-construct their information behaviour. This in turn necessitated a thorough understanding of the behaviour of the trainees. To this end a constructivist approach to inquiry was adopted utilising a narrative technique for the gathering of data. As qualitative research is based on entirely different epistemological and ontological assumptions compared to quantitative research, many feel that validity criteria of the quantitative perspective are therefore inappropriate (Lietz, C. A., Langer, C. L. & Furman, R. 2006:442, Whittemore, R., Chase, S. K. & Mandle, C. L., 2001:524). The findings of this research are presented within the grounded theory criteria of credibility, transferability, dependability, and confirmability.

Traditionally, Library and Information Science researchers took a more positivist approach to inquiry, where large groups were studied using questionnaires or structured interviews (Ellis, 1993:470). The positivist approach, although useful in providing a quantitative picture of, for example, information use within a particular group (Ellis, 1993:469), or to predict how the majority of people will respond to specified situations in similar settings (Mellon, 1990:2), did not provide us with a view of information behaviour as experienced by those involved. Neither did they attend to the context of people's information needs and use (Kirk, 1997:260, Wilson, 1981:5). As a result there has been a shift in Library and Information Science away from the macro approach of studying

large groups to a micro approach involving the intensive study of small groups via observation and unstructured interview techniques (Ellis, 1993:470). This shift towards person-centred user studies has, in addition to calling for more qualitative methods to be used, seen researchers such as Wilson (Selden, 2005:122), and Dervin and Nilan (Kirk, 1997:259) calling for an alternative to the positivist paradigm in the study of information behaviour, suggesting the need to define information 'as a subjective, user constructed phenomenon' (Kirk, 1997:260). This need for a more 'subjective' approach to Library and Information Science is supported by Roberts (Ellis, 1993:470) who notes that the 'expressions and observations of individuals in information situations have a crucial role to play both in the resolution of practical problems and in the formulation of theories'. Although highly relevant to this research, the publications cited above are rather dated. Despite their apparent call to researchers to take a more person-centred and qualitative approach to the exploration of information behaviour, it would appear that although researchers have indeed been carrying out qualitative research (Bates, 2004:15); few researchers are describing the approaches taken in any detail. The 2001 Information Seeking in Context conference highlighted the fact that few Library and Information Science researchers have devoted attention to sharing the details of their research methods and that there was a need to start disseminating their methodological approaches, tools and techniques (Bates, 2004:16). A search of the literature suggests that this does not appear to be happening to any great extent in relation to information behaviour in the year 2006.

Of further relevance to this research was the application of constructivism in learning theory and to epistemology, to how people learn and to the nature of knowledge, and refers to the concept that learners construct knowledge for themselves. Each learner individually (and socially) constructs meaning as he or she learns (Constructivist Learning Theory, 2004:1). This research, in addition to exploring the information behaviour of trainee solicitors, aimed to consider how this behaviour inhibited or enabled their knowledge development, that is, their learning, how knowledge is acquired and used is therefore of relevance. Within a constructivist approach it is accepted that 'the knower interprets and constructs a reality based on his experiences and interactions with his environment' (Gergen,

2004:2). Schwandt (1998, 237) supports this stating that ‘constructivism means that human beings do not find or discover knowledge so much as construct or make it. We invent concepts, models and schemes to make sense of experience and, further, we continually test and modify these constructions in the light of new experience. The constructivist believes that to understand this world of meaning one must interpret it’ (Schwandt, 1998:222).

2.2 Determining Paradigm Fit

A research paradigm is defined as ‘the basic belief system or worldview that guides the investigator, not only in choices of method but in ontologically and epistemologically fundamental ways’ (Guba & Lincoln, 1998:195). Different paradigms create different questions with which to define a problem, different ways of answering those questions, and ultimately, different ways of understanding and thinking about the world (Tierney, 1988:226).

The purpose of this research led to the adoption of a constructivist (previously referred to as naturalistic inquiry) paradigm. This choice of paradigm and its appropriateness in guiding this research is outlined below.

The constructivist paradigm is an interpretive paradigm and ‘assumes a relative ontology (there are multiple realities), a subjective epistemology (knower and subject create understandings), and a naturalistic (in the natural world) set of methodological procedures. Findings are usually presented in terms of the criteria of grounded theory and terms such as credibility, transferability, dependability and confirmability replace the usual positivist criteria of internal and external validity, reliability and objectivity’ (Denzin & Lincoln, 1998:27). Lincoln and Guba’s (Schwandt, 1998:242) constructivist paradigm is a ‘wide ranging eclectic framework whose constructive philosophy is idealist; that is, they assume that what is real is a construction in the minds of individuals. It is also pluralist and relativist: there are multiple, often conflicting, constructions, and all are potentially meaningful’ (Schwandt, 1998:243). This research aimed to explore the information behaviour of trainee solicitors through their experiences within the context of their work environment, what it is that they do, how do they

approach whatever it is that they do and why have they taken that approach. However, each trainee is an individual and that individuality suggests that they will be bringing with them differing and changing experiences from within the firm and from the world at large. This will potentially influence how they perceive the 'what', 'how' and 'why' and as a result they are likely to construct different realities of 'how things are' for them, at a given time, in a particular context. 'Particular actors in particular places, at particular times, fashion meaning out of events and phenomena, through prolonged, complex processes of social interaction involving history, language and meaning' (Schwandt, 1998: 221).

Where the constructivist ontological question considers the form and nature of reality and therefore what is there that can be known about it, the epistemological question considers the nature of the relationship between the researcher and what can be known (Appleton, 1997: 2). Both the ontological and epistemological philosophical underpinnings of constructivist inquiry indicate the need for interaction between researcher and subject. Interaction between researcher and trainee was essential in this research to enable what could be known to become known and to enable access to the multiple realities that might exist. Naturalistic studies focus on viewing experience from the perspective of those involved, to understand why they behave as they do (Mellon, 1990:3). Only the trainees are in a position to provide an insight, from their perspective, into their own behaviour. Through a constructivist approach to inquiry an understanding of this behaviour can be achieved through 'a 'dialectic' of iteration, analysis, critique, reiteration, reanalysis, and so on that leads eventually to a *joint* (among inquirer and respondents) construction of a case (i.e., findings or outcomes)' (Schwandt, 1998:243 emphasis added).

The constructivist methodological question relates to how knowledge is gathered to answer the research question (Appleton, 1997:2). The form of this research was exploratory and descriptive suggesting the need for methods that enabled the gathering of sufficient knowledge to present a detailed description of the trainees' behaviour in context, and the interpretation of that description if this aim was to be achieved.

The ontological, epistemological, and methodological philosophical underpinnings of the constructivist paradigm as discussed here suggested the adoption of a qualitative approach to this research. This research aimed to explore the information behaviour of the trainees as part of their work within the law firm, through 'how' they approached their day-to-day work and 'why' they have taken these particular approaches. The nature of data collected using how and why questions is typically qualitative in nature as these questions demand an explanation rather than, say, frequencies of happenings. The ultimate goal of qualitative research is to understand those being studied from their perspective, from their point of view (Gorman & Clayton, 2005:3). Within this qualitative approach, methods and tools were required that enabled interaction between researcher and trainee in context, that resulted in detailed descriptions of the behaviour of the trainees, from the perspective of the trainees, that allowed potential multiple realities to emerge, and interpretations to be made.

2.3 Research Design

'Naturalistic (*constructivist*) inquiry is best learned through experience' and 'while some researchers may approach naturalistic inquiry with a literature review and a carefully constructed framework, those who focus on understanding a phenomenon from the perspective of its participants generally do not' (Mellon, 1990:23, italics added). This research inquiry did indeed result in learning by experience and in line with the constructivist approach to inquiry its design emerged through the experience of doing. The literature review and resultant framework used to aid in the interpretation and discussion of this research was constructed after engagement with the trainees. 'Within a constructivist approach to inquiry the design emerges, it flows, cascades and unfolds, the guiding substantive theory emerges from the data, is grounded in the data, and meanings and interpretations are negotiated with participants' (Lincoln & Guba, 1985). Thus, the nature of constructivist inquiry and its emergent design does not allow for a pre-defined plan as such, although Lincoln and Guba (1985:188) do provide a generic research model that can be used to guide the iterative style of constructivist inquiry. The resultant constructivist approach to this research has meant that this generic model was adapted to better illustrate the flow of this

2.4 Human Instrument

The human as instrument was an essential element of this inquiry, providing the flexibility to cope with the differing realities that could be encountered as each trainee was likely to bring with them their differing perceptions and experiences of the firm but also that of their life outside of the firm. There was also no way of knowing in advance what the trainees would discuss in relation to their work and as such a human instrument was required that was able to 'adjust to the variety of realities that would be encountered' and one that was 'capable of grasping and evaluating the meaning of that differential interaction' (Lincoln & Guba, 1985:39).

The nature of constructivist inquiry is such that the research design emerges (Lincoln & Guba, 1985: 41) and it was through this emergent design that the author's prior experience and resultant knowledge, tacit and explicit, was realised as being of importance to the research itself, in the role of human instrument, context and interpretation.

2.5 Researcher Experience

Prior experience of working within a law firm environment and of carrying out research about law firms should be declared in relation to this research for three reasons. The first is that prior experience has enabled the development of a tacit and explicit feel for how law firms operate; providing a general contextual understanding of the trainees' natural setting, thereby compensating, to a certain extent, for the inability to observe the trainees in their micro environment. The second surrounds familiarity with the terminology used and activities undertaken by solicitors within the context of law firms, and the third is that of bias.

Having work and research experience of law firm environments proved to be advantageous on a number of levels. Work and research experience provided an understanding of how law firms, in general, operate; their organisational structure and how the trainees fit into that structure. In addition, for the purpose of the investigation of their information behaviour in the context of their work,

this prior experience provided the author with a reasonable familiarity with the types of activities performed as part of that work and importantly the language used, that is, the legal terminology. Gergen and Gergen (Schwandt, 1998:240) note that, ‘accounts of the world ... take place within shared systems of intelligibility – usually spoken or written language’. Without this shared understanding of legal terminology, the rapport between the trainees and the researcher would have been seriously impaired; with a possible need to stop every few seconds for further elaborations on, or explanations of, the terms used and activities recounted, potentially inhibiting the focus of the inquiry. Prior experience has therefore provided a frame of reference, an ability to empathise with the trainees, the enabling of the narratives to flow, and the constructions of the trainees and researcher to mutually shape and emerge. Guba and Lincoln (Schwandt, 1998:243) assume that the observer cannot be neatly disentangled from the observed in the activity of inquiring into constructions. Thus, it is the results of the inquiry process, the interactions between the researcher and the trainees that form the constructions. However, it should also be acknowledged that as a result of this prior experience the researcher will have formed perceptions and opinions as to ‘how reality is’, and therefore ran the risk of assuming meaning from the trainees’ narratives. ‘All instruments are value-based and interact with local values but only the human is in a position to identify and take into account (to some extent) those resulting biases’ (Lincoln & Guba, 1985:40). This potential for bias is to a certain extent alleviated by the iterative nature of the research approach, that is, the use of continual reflection on the research inquiry, findings, and interpretations; the method used; the use of member checking, in the form of the participants themselves and an external legal expert; and triangulation. Throughout the research process an attempt was made to maintain an open mind to the realities encountered, however, as the research is bounded within the Library and Information Science discipline, it is acknowledged that there is a clear bias towards the gathering and interpretation of the findings in the terms of Library and Information Science.

2.6 Tacit Knowledge

The naturalistic paradigm ‘argues for the legitimisation of tacit (intuitive, felt) knowledge in addition to propositional knowledge (knowledge expressible in language form)’ (Lincoln & Guba, 1985:40). As noted above the researcher’s experiences and tacit feel of what ‘life’ is like within law firms better enabled her to empathise with the trainees and to be able to follow the context of their narrations. It was also this tacit feel for the law firm environment that initially informed and guided the inquiry process. ‘The researcher’s personal and intuitive knowledge of a field can inform and guide the inquiry process’ (Appleton, 1997:1). For example, the idea to investigate the information behaviour of solicitors came about in the first instance as a result of prior experience of working for a law firm. During this time it was found that law librarians intuitively felt that they knew and understood the behaviour of solicitors as a result of the experience of working with them. However, there was no real evidence to support or refute what they thought that they knew. It was also knowledge of how law firms operated that signalled that the possibility of observing the trainees in their more immediate environment, that is, within their seat of training, was not likely to be possible. This suggested the need to consider, prior to identifying and entering the firm, alternative forms of data collection that would still enable an in-depth understanding of their behaviour to be achieved. The identification of the data collection tool prior to identifying the firm was necessary, as in order to gain consent of entry, the researcher intuitively felt that it was likely that the firms would want to know, in detail, exactly what entry into the firm would mean, in terms of frequency, impact on the day-to-day workings of the trainees, when access would be required and how the data would be gathered. Experience also indicated that access itself might not be easily granted, and the early identification and cultivation of potential suitable sites was required.

2.7 Sampling

Initially two law firms were purposively identified as potential sites for inquiry, both being geographically readily accessible and both known to be taking an

intake of at least six trainees. Having been turned down by one, access was granted to the second. Twelve trainees were interviewed; six in the first stage of the research and a further six in the third stage of the research. By purposively inviting all trainees who commenced their traineeship at the same time to participate in the research, it was hoped that this would increase the potential for the discovery of the variety of realities that might exist. 'In the context of a particular research question, researchers may wish to use multiple data sources to provide views from different perspectives' (Bradley, 1993:441).

Purposive sampling was also used to focus in on those trainees' constructions to be used in the final presentation of the findings of this research. Using inductive analysis, respondents were identified that offered the opportunity to present the reader with rich data, and the resultant emerging theory was based not only on individual trainees across differing seats of training, but also on groups of individuals from within the same seat of training. 'As insights and information accumulate and the investigator begins to develop working hypotheses about the situation, the sample may be refined to focus more particularly on those units that seem most relevant (Lincoln & Guba, 1985:202).

2.8 Natural Setting

This research was carried out within the natural setting of the trainees, that is, within the law firm itself. A constructivist ontology suggests that realities are wholes and cannot be understood in isolation from their contexts, that the research should take place with the entity in context for fullest understanding because of the belief that context is crucial in deciding whether or not a finding may have meaning in some other context as well (Lincoln & Guba, 1985:39). Due to the confidential nature of the work of the participants within this research, data collection could only take place within an interview room in the firm, in the trainees' macro environment, and not within their micro environment, their actual seat of training, for example, within the Property Department or Commercial Litigation Department. However, their macro environment provided context in relation to organisation culture in the form of artefacts, that is, pictures, office furniture, meeting rooms and reception, providing the author with

an impression of the nature of the organisation within which the trainees worked. The resultant 'suits and corporate feel' of the organisation further suggested the need for 'appropriate' dress. Mellon suggests (1990:56) 'how the interviewer dresses has an immediate impact on rapport'. As the researcher entered into the field with no a priori theory or hypotheses there was a heavy reliance on establishing a good rapport with the trainees to aid, for example, the research design to emerge and for the identification of key themes for follow-up. What might or might not be disclosed would also be dependent upon the trainees' perception of the researcher and in the development of trust and respect between author and trainee to better enable interaction.

Despite being restricted to the macro environment, context remains crucial, not only in relation to the guiding paradigm but also to the subject of this inquiry, as context has been identified within Library and Information Science (Talja, Keso & Pietilainen, 1999), Knowledge Management (Gottschalk, 1999), and Learning (O'Donoghue & Maguire, 2005:440) literature as being of relevance in relation to information behaviour and knowledge development. It is acknowledged that this restriction of access to the trainees' micro environment is likely to have influenced not only what could be discovered but also the resultant understandings of the realities of the trainees themselves, however, what can be discovered and the understandings of realities is not reliant on being situated in context alone. Wilson (Ellis, 1993:474) observes that in social research direct observation is often not practical and indirect observation in the form of interviews or some other kind of self-reflection must substitute for it'. In this research, the research technique, a focused interview narrative, in addition to the author as human instrument, and member checking, are demonstrated as contributing to the credibility and confirmability of the realities and their interpretation on the part of the author and the respondents.

2.9 Access to the Natural Setting

'The constructivist researcher will find that they need to 'sell' their personality in order to gain access to the study settings' (Appleton, 1997:6). This 'selling of personality' relied upon more than the efforts of the researcher but in the

identification of a gatekeeper to the firm. Personal and professional acquaintance with information professionals in law firms accelerated the potential for access and resulted in access being granted with relative ease. Having been turned down by one firm who 'felt it was not appropriate', access was granted to another thanks to the help and 'selling' by the gatekeeper, and the further selling and reassurance of the nature of the research by the researcher, to the more formal gatekeeper, the managing partner of the firm. Access was granted to the trainees as long as the research did not interfere with their work and a letter confirming access was provided. The role of the information professional as gatekeeper and informant was invaluable, not only in introducing the idea of participation in the research to the firm and to the trainees but in the arranging of the initial interviews. Law firms by their very nature and purpose tend to be formal and this introduction by the information professional, someone familiar to the trainees, coupled with the consent of the managing partner was felt to have encouraged the trainees' initial participation. The information professional also provided further background to the firm, its structure and legal coverage.

2.10 Ethical Considerations

Lawyers carry out work of a confidential and often sensitive nature and care needed to be taken in the gathering and presentation of that data. Permission was requested and granted in relation to the recording of the interviews and the trainees were informed that any disclosure regarding specific names or legal cases would be deleted from the tapes, transcriptions and analysis. 'The fact that people are being studied in these contexts leaves them potentially vulnerable to exploitation through naïve disclosure' (Appleton, 1997:6). Anonymity and confidentiality were also discussed in relation to the trainees and the firm. There is a real need for the constructivist inquirer to maintain anonymity of study settings to protect the participants' identities (Appleton, 1997:6). An assurance was given that the trainees' participation in the research would be kept confidential and that the name of the firm would also be kept confidential. The question of confidentiality within the firm, from other participants within the firm, was difficult especially where quoting the respondents; 'quoting individuals exposes them to special risks because other locals may, because of their special

knowledge, be able to identify the respondent even when attribution does not occur' (Lincoln & Guba, 1985:255). An attempt at addressing this was made by changing all respondents to trainee1, trainee 2 and so forth. The trainees were also requested to keep their individual involvement confidential. Those trainees at most risk of being identified by their colleagues are those who have agreed to member check the draft analysis, despite a request to keep their involvement confidential from each other, this cannot be guaranteed.

The University to which this thesis was submitted also has an ethics code of practice and the initial proposal for this research was approved through their committee procedures.

2.11 Focused Interview Narrative Approach

Observation is considered to be an ideal or root method of qualitative research (Ellis, 1993:474) but for this research inquiry direct observation was not possible due to the nature of the work of law firms. In addition, past research by Ellis (1993:475) identified information seeking, [an aspect of information behaviour], as being integrated with the rest of their [respondents] activities making observation almost totally impracticable. The interview was therefore identified as an appropriate technique. According to Gorman and Clayton, (2005:49) the interview study is in some respects a hybrid; it shares many characteristics of the observational study in terms of its focus on place, group or activity; but it is also closely related to the life history study, which, in fact, relies heavily on interviewing for data collection. This research was interested in the work lives of the trainees within the firm and a narrative approach was considered appropriate. Within the field of social sciences there have been questions raised about the reliability (*dependability*) and validity (*confirmability*) of eliciting narratives as a research method, however, it can be argued that the stories told are a means to understand our subject better (Holloway & Jefferson, 2000: 34 italics added), and as Polkingthorne (1988:1) suggests, 'narrative is the primary form by which human experience is made meaningful'. As this research was interested in specific events in the trainees' lives and not their 'whole life story or biography' a more 'focused interview' (Mishler, 1986:99) narrative approach was adopted. The

focus of the narratives in this research are the trainees who are relating their experiences in the context of their work, that is, telling us about events that they have experienced and it is these stories or re-constructions that are a means to better understand their behaviour in context and from their perspective.

Followers of the constructivist paradigm recognise that realities can be multiple and any chosen technique needs to enable these to emerge. By taking a narrative approach the agenda is open to development and change, depending on the narrator's experiences (Holloway & Jefferson, 2000:31), and therefore fits within the axioms of the constructivist paradigm. The narratives were led by the trainees themselves as the tool enabled them to choose the events they want to disclose to the researcher. Constructivist inquiry suggests a need for an unstructured approach to interviewing (Lincoln & Guba, 1985:269). The choice of the focused interview narrative technique, despite suggesting some structure, is only structured in that it focused the boundaries of the initial opening inquiry for the respondents, that is, it set the inquiry within the context of their work. It helped to set the scene for the trainees by offering them a starting point, somewhere for the narrative to begin. Where the trainees opted to go from this starting point was open and dependent upon them thereby enabling multiple realities to emerge.

The focused interview narrative approach required that the question(s) asked be adapted from more general biographical questions such as 'tell me about your life' to a more focused open question, 'tell me about a task that you have been involved in to-date in your current seat of training'. Essentially by taking this approach the researcher was 'turning questions about given topics into story-telling invitations' (Holloway & Jefferson, 2000: 35). 'Current seat' as oppose to 'work' was chosen as it was the seat of training that provided a context for the trainees' narrations.

The focused interview narrative approach also allowed for follow up questions after the narrative was finished, follow-up questions pertaining to each trainee's individual story. This did however require careful listening as the trainee was telling their story, especially, as is recommended in the literature, that when following up points, use is made of the respondent's own words (Holloway &

Jefferson 2000:36). An attempt was made at this type of follow up questioning in order to gain further clarification of, and insights into, points, and indeed to 'dig deeper' into the narrative itself. The phrasing of follow-up questions took the form of focused open questions, for example, 'You said that you initially looked in Halsbury's to find How did you know to look there?' Familiarity with legal terminology and an awareness of the types of work that trainees undertake proved invaluable when using this approach. This made it easier to follow and to keep track of the narrations, particularly given that there was no way of knowing in advance what the trainees would talk about, or how their stories would unfold. Use of a focused interview narrative approach increased the potential for the creation of a thick description of the trainees' information behaviour in context, and when combined with the use of follow up questions, encouraged the trainees to reflect on the events being narrated and on their behaviour. In addition, the types of follow-up questions used were also useful as a form of checking and confirmation of responses with the trainees at point of need. This strengthens the credibility and transferability of the subsequent findings.

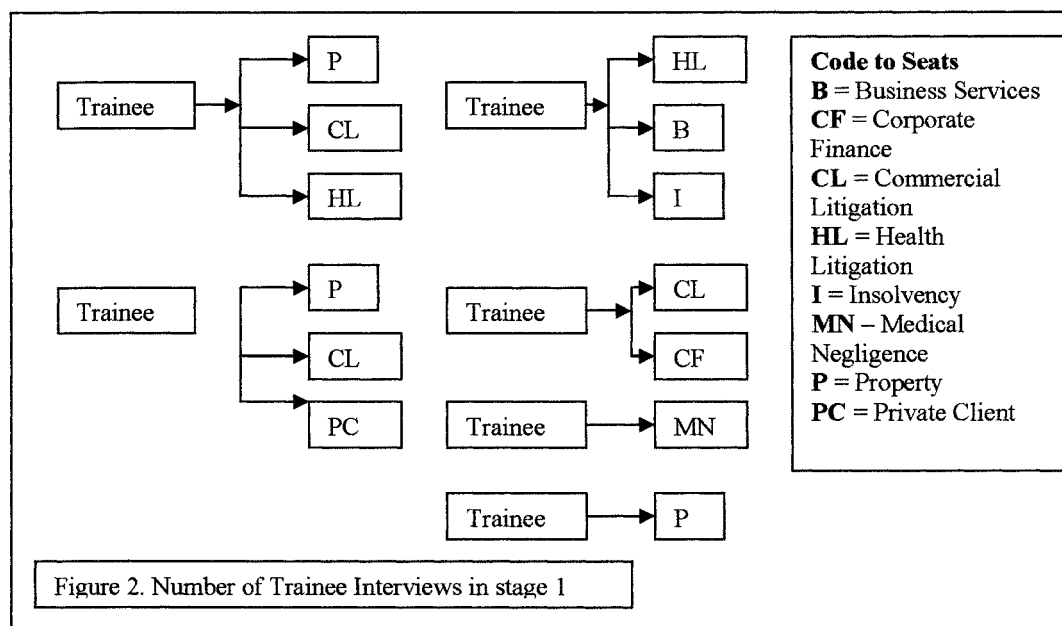
Whilst this approach proved successful in eliciting stories from the trainees it must be acknowledged that the trainees will have only disclosed what they wanted to disclose, and as one cannot remember every experience that one has had at any given time, will have been selective about the events that they narrated. What is narrated is likely to have been affected by their reality at the time of the interviews and by the values that they brought to the situation.

2.12 Data Collection

The data collection for this research took place over five years and evolved through five distinct stages. Stage one included making the initial contact with the firm and very quickly required contact to be made with the trainees. This stage also served to test the focused interview narrative approach to data collection.

Once the law firm had granted permission for access to the trainees, the researcher felt that there was a need to enter the firm as quickly as possible in

order to be seen to be taking them up on their offer of access. Access was granted in September and the trainees who started in August were approached regarding their willingness to participate, with six agreeing in principle. The initial plan of this research was to interview each of the trainees at the end of each of their four seats of training. A seat of training lasts six months. The six trainees were therefore invited four times to attend interviews. Unfortunately no trainees were able to spare the time for four interviews. Figure 2 maps the number of interviews held for each of the six trainees and within which seat these were held.



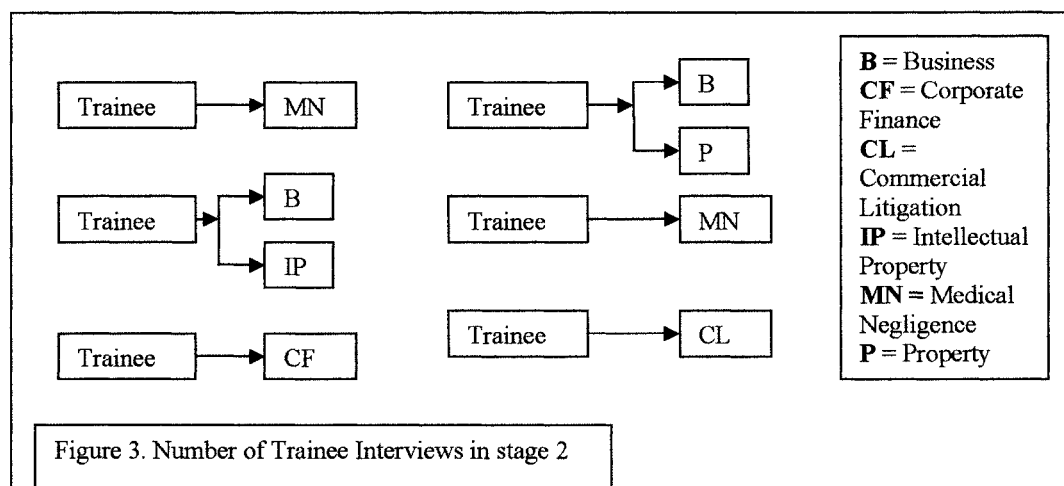
Each set of interviews was held towards the end of each of the trainee's seats of training. This was to ensure that each trainee had been in the seat long enough to feel both confident and comfortable in being able to talk about events in their work. Prior to commencing the interview, each trainee was made aware of the purpose of the research and permission was obtained to tape the interview. Interviews lasted approximately one hour. It was not possible to transcribe the tapes after each interview as the interviews were scheduled to happen within a day or so of each other. Although carried out over a short and intensive period of time, this approach proved to be valuable as it resulted in an increased immersion, on the part of the researcher, within the social worlds of the trainees.

Regularly visiting the firm across a two week period, three times within the two year training period, brought the researcher more fully into the firm. This increased immersion enabled the quick return of past memories of legal practice work and the terminology used. It is felt that these experiential memories enabled a more empathic, natural approach to interviewing, in that the researcher, despite being away from legal practice work for some years, was still able to bring a sound understanding of legal practice to the setting. Before the second and third set of interviews for this group of trainees, the tapes from the first, and where appropriate, second set of interviews, were played to bring the author back into the social world of the trainees and to refresh memories of legal practice work and terminology. The playing of the tapes also initiated thoughts and ideas relating to themes for further investigation through the literature. The tapes were fully transcribed at the end of this initial stage of the field work period.

The second stage of the research involved an initial review of the literature based on the themes identified as emerging from the first stage and in line with the aim of this research. There is some discussion in the literature (Selden, 2005:123) as to the risks surrounding not carrying out a literature review prior to entering the field of study, for example, there is the potential that someone has already carried out your project idea. However, the rationale for not carrying out a thorough literature review in advance is to keep the researcher open to concepts and relationships that will emerge from the data, and to avoid assumptions (Pace, 2004:333). By not undertaking a thorough review of the literature prior to data collection, this research has attempted to keep within the axioms of the naturalistic paradigm and is a move away from more traditional approaches to information behaviour research. It should be noted however, that in order to meet the needs of the researcher's institution in relation to PhD registration, there was a need to have carried out some preliminary research in order to present the research idea. This preliminary search of the literature did not identify any similar prior research; however, it must be acknowledged that it was still a possibility that prior research existed. The researcher's prior experience is also acknowledged as informing this research. No-one would claim to enter the field completely free from the influence of past experience and reading (Heath & Cowley, 2004:143).

Themes that emerged from the transcripts of the interviews at this stage included information need, knowledge needs, and learning.

The third stage of this research involved the identification of a further set of trainees as it was initially felt that six trainees would be insufficient to generate sufficient data for theory to emerge. On reflection, despite having taken a constructivist approach to inquiry, positivism had reared its head in terms of quantity, more seemed safer! Following the same focused interview narrative approach, considered to be successful in the first round of interviews, this second set of trainees was invited to attend three interviews across their two year period of training. Interestingly, fewer of the trainees in this round of interviews were able to attend at least two interviews. Figure 3 below maps the number of interviews held for each trainee and within which seat these were held.



The notes made were compared with those from the first round of trainee interviews and used to further support, or add to, the initial identification of subject related themes for follow-up through the literature. The tapes from this round of interviews were fully transcribed at the end of this stage of the field work period.

The fourth stage of the research involved a more detailed exploration of the now fully transcribed scripts using inductive analysis techniques. This stage also

involved a thorough exploration of the literature in line with the key themes emerging from the scripts. It was also at this stage that a more focussing of the sample took place, resulting in the full inductive analysis of six trainees across two seats of training, Property and Commercial Litigation. This is elaborated upon in the Inductive Data Analysis section below.

The fifth stage was that of member checking and the working towards agreed outcomes. A copy of the penultimate data analysis and interpretation was sent to three of the six trainees selected for inclusion, (the remaining three trainees had moved to other firms), two of whom responded noting their agreement with the data and the interpretations. These responses can be found in Appendix 1. The third trainee was not able to respond due to pressures of work. A copy of the final analysis and interpretation was given to a legal expert, external to the firm. His response can be found in Appendix 2.

2.13 Inductive Data Analysis

Inductive data analysis may be defined as a process for making sense of the field data and involves unitising and categorising the data (Lincoln & Guba, 1985:202). Coding entails categorising segments of data with a short name that simultaneously summarises and accounts for each piece of data. Codes show how one selects, separates, and sorts data to begin an analytic accounting of them and is the first step in moving beyond concrete statements in the data to making analytic interpretations (Charmaz, 2006:43).

Scripts were read and re-read to increase familiarisation and then coded. Theory coding consists of at least two main phases, an initial phase involving naming each word, line or segment of data, followed by a focused selective phase that uses the most significant or frequent initial codes to sort, synthesise, integrate and organise large amounts of data. Within this research segments of data were coded using open coding (Strauss and Corbin, 1998:223), in relation to the events that were happening in the data. This initial coding was developed by reading through each of the transcripts, considering the incidents being narrated, sentence by sentence and in segments of sentences, and considering their suggested related

code. Moving across differing interview transcripts using the constant comparative method of Glaser and Strauss (Gorman and Clayton, 2005:53), suggested similar coding incidents and additional further codes. However, it should be noted that the focus of the inquiry, the information behaviour of the trainees, has influenced what was identified within the transcripts although an attempt was made to maintain an open mind when coding. 'Grounded theorists' background assumptions and disciplinary perspectives alert them to look for certain possibilities and processes in their data. These shape research topics and conceptual emphases' (Charmaz, 2006:16). Whilst identifying initial descriptive codes, any additional thoughts of potential interest for further consideration were added in brackets after the initial code, for example, the code 'perception of task' relates to how the trainees were appearing to perceive the task and against this code various perceptions started to emerge such as 'difficulty', 'urgency', providing an indicator of the potential variances within perception. Starting with a random script, each script was coded inductively, through the identification of themes present in sentences and paragraphs. An example of the initial coding structure can be found in Appendix 3.

The second major phase was focused coding. These codes are intended to be more directive, selective, and conceptual than incident by incident coding. Focused coding entails using the most significant or frequent earlier codes to sift through large amounts of data (Charmaz, 2006:57). Initially significant coding categories were identified through the use of Strauss and Corbin's (1998:123) axial coding. Axial coding specifies the properties and dimensions of a category. The purposes of axial coding are to sort, synthesise and organise large amounts of data and reassemble them in new ways after open coding. The resultant classification can be found in Appendix 4.

This attempt at classification did serve to help bring the fractured data back together in a semi coherent order. However, on trying an initial analysis of the data using this framework it was found that, although helpful in providing a place to start, the framework was felt to be inadequate in that the properties of the categories did not feel right, nor did they help to reflect the data or the potential inter-relationships within the data. There was a need therefore to identify a

method of analysis that enabled both codes and categories to be identified as well as enabling the contextualisation and characterisation of the behaviour of the trainees to emerge. This was achieved through the following process.

In considering the mass of data collected, twenty one interviews across twelve trainees with some 125,086 words, the decision was made to attempt to identify a more focused sample for analysis. As the trainees undertake six months of training in a range of legal practice areas, called seats, it was decided to group the trainees by their seats of training. From this grouping, two seats, Property and Commercial Litigation, were identified as providing the context to characterise the behaviour of six trainees, four trainees in the context of each individual seat with two of these trainees being present in both seats, thereby affording the opportunity to carry out a cross trainee and a cross-seat analysis. Grouping in this way would also allow multiple realities to emerge within the context of each seat of training. This shift in approach to analysis suggested a need to re-consider the original codes and categories. Through considering the axial coding with a re-reading of the individual transcripts six broad key categories or selective codes were identified. Selective coding denotes the final step in analysis, the integration of concepts around a core category (Glaser & Strauss, 1998:236). Each trainee's transcript was then analysed against these six broad categories:

- Roles and Tasks
- Task Initiation
- Approach to task
- Knowledge of and Use of Resources
- Information Processing and Use
- Knowledge Transfer

Although a lengthy process this enabled true immersion within the data. For each trainee, each key category was then summarised as to key findings and initial interpretations drawn, based on the use of memos as described below. This same process was then carried out with each of the trainees in the context of Commercial Litigation.

The resultant analyses of the six trainees, being lengthy, suggested a need for methods that both enabled the bringing of key salient points to the fore whilst reducing the word count. Glaser and Strauss (1998) and Charmaz (2006) discuss the use of memos in qualitative analysis and their value in enabling the working towards conceptual density and integration. ‘Memos contain the product of analysis or directions for the analyst’ (Glaser and Strauss, 1998:217). However, there is no right or wrong way of doing memos, as Charmaz notes, ‘there are few methods so do what works for you’ (Charmaz, 2006:80). The memos created in this research contained the product of analysis, helped direct the research and the working towards conceptual density and integration. Furthermore, ‘memo writing prompts you to analyse your data and codes early in the research process’ (Charmaz, 2006:72). To this end, through grouping the analyses of each of the trainees under the broad key categories identified above, an initial series of summary memos was written for each broad key category. For example, the analyses for each trainee within the broad key category ‘Roles and Tasks’ were brought together and presented in the form of a memo. These memos not only resulted in bringing the findings for each of the trainees together, but helped enable better decisions to be made as to which categories should remain key or central, and which should become sub-categories. These memos also enabled the bringing together of multiple realities surrounding categories. For example, in relation to the types of tasks the trainees were allocated, task complexity was identified as a potential key category. However, in considering the narratives of the trainees in relation to task complexity, differing experiences were identified as to why a task could be considered more complex as perceived by the trainee and therefore the memos needed to reflect these differing experiences. For example,

An extract from a memo from property in relation to tasks and task complexity:

“Although the trainees’ tasks could be considered as routine, when considering the range of roles that a trainee enacts in reaching completion of a fairly routine task, it is suggested by this research that these varying roles, when combined with a lack of knowledge or prior experience are likely to increase task complexity as perceived by the

trainee. However, all the trainees will have had some prior experience of property law at University or through the Legal practice course and cannot be said to have no experience. This experience however, in some instances, was difficult to realise in terms of 'how one comes to know what one knows' and, in the case of Trainee 5, was perceived to not necessarily reflect the situations met in practice and therefore it is more likely to be the lack of experience in a particular task context, combined with varying roles that can be said to increase task complexity as perceived by the trainee. Trainee 2, despite having prior experience of working within Property, emphasises her continuous learning and this combined with varying roles is also likely to increase task complexity as perceived by the trainee."

From this memo the differing experiences of the trainees are explored through a consideration of their individual experiences in relation to the emerging concepts of tasks and task complexity. In the memo above a relationship is identified between tasks and task complexity as a result of roles, prior experience, and learning. Through writing these types of memos an initial decision was then made as to key categories, sub categories and influential or shaping factors. For example, in this instance, tasks was identified as a key category, task complexity as a sub category, and roles and prior experience and learning were identified as potential shaping factors. 'Memos give you a space and place for making comparisons between data and data, data and codes, codes of data and other codes, codes and category, and category and concept, and for articulating conjectures about these comparisons' (Charmaz, 2006:72).

The same process was then carried out in relation to the trainees within the context of Commercial Litigation, bearing in mind the categories and shaping factors that emerged from memo writing within Property, but at the same time taking care to remain open to any variations and additional emerging categories and shaping factors.

The writing of memos also served to help in the identification of central categories and the integration of concepts (Strauss and Corbin, 1998:148).

Through moving backwards and forwards between memos and their interpretations, using the constant comparative method, tentative decisions were made as to substantive categories, sub categories, and shaping factors. These were then pulled together into a mapped diagram ensuring that any differences between the trainees, and any differences within the context of the two seats were highlighted. An example of the resultant mapping of the categories, sub categories and shaping factors identified as a result of this process can be found in Appendix 5.

This initial attempt at analysis and the writing of summary type memos resulted in a total of 66,251 words, and clearly required further consideration. The decision was made to merge the analysis of the trainees across the two seats of training. Due to the continuous iterative nature of the research, the need to merge the analysis of the trainees required the re-thinking and re-consideration of the initial analysis and summary memos. As a result of the differing realities or experiences identified for each of the trainees, there was a need to re-configure the memos as to their content and meaning, and to further consider their associated categories and shaping factors. 'Writing successive memos throughout the research process keeps you involved in the analysis and help you to increase the level of abstraction of your ideas' (Charmaz, 2006:72). The question was how does one merge the analysis of the six trainees without losing much of the density and integration already achieved? After much deliberation it was decided to merge the findings from the six trainees across the two seats of training and through an iterative process of analysis, questions were posed based on the selective coding categories identified above, for example,

The first category 'Roles and Tasks' resulted in considering:

- What types of tasks are the trainees involved in?
- What is the role of the Trainee in undertaking these tasks?
- Are tasks more complex than their initial nature implies?

The second category 'Initiation of task' resulted in considering:

- How do trainees perceive the tasks they are given?

The third category 'Approach to Task' and the fourth category 'Knowledge of and Use of Resources' came together under one question:

- How do the trainees approach the tasks they have been allocated?

The fifth category 'Information Processing and Use' and the sixth category 'Knowledge Transfer' came together under one question:

- How is information and knowledge processed, used and transferred?

As the writing of memos is an ongoing process this seemed to be both a natural and reasonable way forward. It was also felt that by posing questions the analysis would flow better and more readily enable integration of data to be achieved, whilst enabling multiple, and at times differing, realities to be presented. For example, it was identified that whilst the trainees were found to feel uncertain when unfamiliar with a task, for one of the trainees this proved not to be the case. Through the asking of questions as described above, all variances identified in the findings and researcher interpretations could be explored within each heading.

The resultant analysis from this process can be found in Appendix 6. This has been included as an appendix as despite merging the analysis of the six trainees as discussed above, the word count was still too high and required further consideration in relation as to how to best present the key findings. Furthermore, Appendix 6 forms a crucial part of the audit trail and can be referred to in conjunction with section 4 of this thesis which presents the final findings of this research surrounding the Social World of the Trainees using characterisations, diagrams, and memos. It should be noted, however, that as a result of the iterative process of analysis in re-presenting the findings in section 4, the questions were altered slightly to break down the trainees' behaviour further. As a result of this the fifth and sixth categories were separated out. The fifth category resulted in considering 'How is information processed and used?', and the sixth category resulted in considering 'How is information and knowledge

shared?’. Out of this, however, emerged another question, ‘Is learning transferable from seat to seat?’.

Theoretical saturation is suggested by Glaser (Charmaz, 2006:113) ‘as not seeing the same patterns over and over again. It is the conceptualisation of comparisons of these incidents which yield different properties of the pattern, until no new properties of the pattern emerge. This yields the conceptual density that when integrated into hypotheses make up the body of the grounded theory’. The process of analysis, as discussed above, although time-consuming, enabled theoretical saturation to the extent that, comparisons were made between the data incidents found for each trainee selected, and through the identification and comparison of the selective categories, until no new patterns or properties of patterns emerged. The writing of memos enabled sense to be made of the selective categories and for the constructions to be drawn that presented the differing realities of the trainees, until no new constructions or properties presented themselves. Throughout the data analysis process, and as an aid in assessing saturation, questions based on suggestions by Charmaz (2006:113) were asked, e.g.,

- What potential comparisons are there?
- What do these comparisons suggest?
- Where do they lead?
- What about negative cases?
- Do they suggest any new conceptual relationships?

As this study presents findings in relation to six trainees within the context of two seats of training, each seat of training lasting six months, it must be acknowledged that theoretical saturation is limited by this context and time-frame. At the end of each six month period the trainee moves to a [generally] different seat, and therefore, concepts identified in seats other than those presented here would add a potentially differing dimension, each seat being concerned with a differing legal practice area, with potentially differing tasks, needs and behaviour.

2.14 Establishing Credibility

‘Credibility is established by having the findings approved by the constructors of the multiple realities being studied and is shown by prolonged engagement with the research participants, triangulation of the techniques used to study those participants and their contexts, peer debriefing, and member checking’ (Pickard & Dixon, 2004:7). Credibility is established for this research through the use of prolonged engagement within the firm, the focused narrative interview approach to data collection, triangulation, peer debriefing and member checking. The trainees were interviewed over a period of two years enabling trust to be developed between researcher and trainees, where the trainees felt comfortable to feel able to say what they wished. The focused narrative interview approach enabled the asking of follow-up questions, for example, ‘you said that....’ and was useful as a form of checking and confirming responses during interviewing. Triangulation was achieved through the collection of data from several differing cases (Gorman and Clayton, 2005:25), in this instance the collection of data from six trainees. The use of the supervisory team and a lawyer, independent to the firm, enabled various drafts of the analysis to be reviewed in terms of the interpretations being drawn. Of some value to credibility of interpretation was the use of member checking, whereby two of the three trainees approached fed back their agreement with the interpretations. But, as only two of the trainees fed back, member checking as an indicator of credibility is limited. However, one of the trainees did comment on the usefulness of the analysis in reminding her of what it was like to be a trainee, and her ability to transfer the findings to her current situation, as a mentor to a new trainee. This provides evidence that the data collected is still credible despite the lapse in time between data collection and the writing up of this research.

2.15 Transferability

In constructivist inquiry, the goal is to allow for transferability of the findings rather than wholesale generalisation of those findings (Pickard & Dixon, 2004:8). They [the findings] should display enough evidence for each construct to allow

readers to make their own assessment of the fit with theory (Eisenhardt, 1989:548). Through the use of memos, thick descriptions have been produced which could be transferred to other situations based upon their contextual applicability.

2.16 Dependability

Dependability or trustworthiness can be demonstrated through maintaining an audit trail (Lietz, C. A., Langer, C. L. & Furman, R. 2006:450, Gorman & Clayton, 2005:27, Lincoln & Guba, 1985:317). Since there is no credibility without dependability, a demonstration of the former is sufficient to establish the latter (Lincoln & Guba, 1985:316). The audit trail for this research consists of the raw data in tape and transcript form; all data analysis, data reduction and interpretation products; coding and axial coding; and journals of process notes and thoughts. Appendix 7 illustrates the audit trail.

2.17 Confirmability

‘The audit trail is used to provide a means of ensuring that constructions can be seen to have emerged directly from the data, thereby confirming the research findings and grounding them in the evidence’ (Pickard & Dixon, 2004:9). How data was analysed is discussed within this section, with products as a result of the audit process highlighted within the audit trail in appendix 7 and examples of products included as appendices.

References

Appleton, J. (1997) ‘Constructivism: a naturalistic methodology for nursing inquiry’, *Advances in Nursing Science*, 20 (2), pp. 13-22.

Bates, J. (2004) ‘Use of narrative interviewing in everyday information behaviour research’, *Library and Information Science Research*, 26, pp. 15-28.

- Bradley, J. (1993) 'Methodological issues and practices in qualitative research', *Library Quarterly*, 63 (4), pp. 431-449.
- Charmaz, K. (2006) *Constructing grounded theory: a practical guide through qualitative analysis*. Sage Publications.
- Constructivist Learning Theory*, (2004) Available at:
[\[http://www.artsined.com/teachingarts/Pedag/Dewey.html\]](http://www.artsined.com/teachingarts/Pedag/Dewey.html) (Accessed: 26th April 2004).
- Denzin, N. K. & Lincoln, Y. S. (eds) (1998) *The landscape of qualitative research: theories and issues*. Sage Publications.
- Denzin, N. K. & Lincoln, Y. S. (eds) (1998) *Strategies of qualitative inquiry*. Sage Publications.
- Eisenhardt, K. M. (1989) 'Building theories from case study research', *Academy of Management Review*, 14 (4), pp. 532-550.
- Ellis, D. (1993) 'Modeling the information-seeking patterns of academic researchers: a grounded theory approach', *Library Quarterly*, 63 (4), pp. 469-486.
- Gergen, K. (2004) Constructivist epistemology. Available at:
[\[http://www.stemnet.nf.ca/~elmurphy/emurphy/cl2.html\]](http://www.stemnet.nf.ca/~elmurphy/emurphy/cl2.html) (Accessed 26th April 2004).
- Gorman, G.E. & Clayton, P. (2005) *Qualitative research for the information professional: a practical handbook*. 2nd ed. Facet Publishing.
- Heath, H. & Cowley, S. (2004) 'Developing a grounded theory approach: a comparison of Glaser and Strauss', *International Journal of Nursing Studies*, 41, pp. 141-150.

Holloway, W. & Jefferson, T. (2000) *Doing qualitative research differently: free association, narrative and the interview method*. Sage Publications.

Kirk, J. (1997) 'Manager's use of information: a grounded theory approach', in: Vakkari, P., Savolainen, R. and Dervin, B. (eds) *Information seeking in context. Proceedings of an International Conference on Research in Information Needs, Seeking, and Use in Different Contexts* 14th-16th August, 1996, Tampere, Finland, pp. 257-266.

Lietz, C. A., Langer, C. L. and Furman, R. (2006) 'Establishing trustworthiness in qualitative research in social work', *Qualitative Social Work*, 5 (4), pp. 441-458.

Lincoln, Y. S. and Guba, E. G. (1985) *Naturalistic inquiry*. Sage Publications.

Mellon, C. A. (1990) *Naturalistic inquiry for library science: methods and applications for research, evaluation and teaching*. Greenwood Press.

Mishler, E. G. (1986) *Research interviewing: context and narrative*. Harvard Univ. Press.

O'Donoghue, J. and Maguire, T. (2005) 'The individual learner, employability and the workplace', *Journal of European industrial Training*, 29 (6), pp. 436 – 446.

Pace, S. (2004) 'A grounded theory of the flow experiences of Web users', *International Journal of Human-Computer Studies*, 60, pp. 327-363.

Pickard, A. & Dixon, P. (2004) 'The applicability of constructivist user studies: How can constructivist inquiry inform service providers and systems designers?' *Information Research*, 9 (3) paper 175, [Available at: <http://InformationR.net/ir/9-3/paper175.html/>] (Accessed: 8th August 2005).

Polkingthorne, D. E. (1988) *Narrative knowing and human sciences*. SUNY Press.

Selden, L. (2005) 'On grounded theory – with some malice', *Journal of Documentation*, 61 (1), pp. 114-129.

Schwandt, T. A. (1998) 'Constructivist, interpretivist approaches to human inquiry', in Denzin, N. K. and Lincoln, Y. S. *The landscape of qualitative research: theories and issues*. Sage Publications, pp. 221 – 259.

Strauss, A. & Corbin, J. (1998) *Basics of qualitative research: techniques and procedures for developing grounded theory*. 2nd ed. Sage Publications.

Talja, S., Keso, H. & Pietilainen, T. (1999) 'The production of 'context' in information seeking research: a metatheoretical view', *Information Processing and Management*, 35, pp. 751-763.

Tierney, W. G. (1988) 'Much ado about something: naturalistic inquiry and the paradigm', *The Journal of Higher Education*, 59 (2), pp. 225-230.

Whittemore, R., Chase, S. K. and Mandle, C. L. (2001) 'Validity in qualitative research', *Qualitative Health Research*, 11 (4), pp. 522-537.

Wilson, T. D. (1981) 'On user studies and information needs', *Journal of Documentation*, 37 (1), pp. 3-15.

3. Knowledge, Learning, and Information Behaviour: a review of the literature

3.1 Introduction

As this study took a constructivist approach where the theory emerges from the data, it is the data itself that ultimately revealed themes pertaining to information behaviour and its influence on the knowledge development of the trainees.

Themes that emerged from an analysis of the trainees' narrations led the researcher to explore the literature surrounding knowledge, learning, and information behaviour. For example, early in the iterative process of analysis, it became clear that there was a need to explore the concept of knowledge and how it might differ from information. There was also an identified need to explore how knowledge is constructed. Moving through the iterative process of analysis, further themes identified as emerging from the trainees' narrations included tasks and roles, approach to tasks, knowledge and use of resources, information processing and use, and knowledge sharing.

The following sections discuss past research in knowledge within the field of knowledge management and learning, followed by past research in information behaviour within the field of Library and Information Sciences, in order to situate this study within an established framework and to aid in its interpretation and discussion.

3.2 Knowledge Management

The aim of this research is to characterise the nature and role of the information behaviour of trainee solicitors in the context of knowledge development within a law firm environment. It is useful, therefore, to explore what is meant by knowledge and how knowledge is developed in order to present an argument as to its relevance for the consideration of information behaviour. An initial examination of knowledge within the literature surrounding Knowledge Management provides us with some context as to the considered importance of knowledge from an organisational perspective.

Knowledge has for some time been recognised as a source of competitive advantage (Chourides, Longbottom and Murphy, 2003:29; Koskinen, 2003:67; Wagner, 2003:97; Beckett, Wainwright and Bance, 2000:601; Beijerse, 1999:94) but it is only now that there is recognition of the need to identify, capture and share this knowledge, to use this knowledge as a source of competitive advantage. Organisations are thought to have been learning haphazardly from experience but rarely capturing this knowledge in ways that can be transformed into available knowledge embedded in the organisational memory (Wagner, 2003:97). For this knowledge to furnish a sustainable competitive advantage, an organisation must have some form of exclusive, or near exclusive, ability to exploit it (Beckett, Wainwright & Bance, 2000:601). It follows therefore, that there should be a growth in interest in finding ways to 'identify', 'use', and 'manage' this knowledge if organisations are to cash in on its benefits. This 'knowledge-based' view of competitive advantage has led to the discipline of knowledge management (Beckett, Wainwright & Bance, 2000:601) and the growth in interest in knowledge management is evident by the plethora of papers, conferences and web resources available.

However, despite the plethora of literature that discusses and promotes knowledge management, there is no universal agreement on a definition (Al-Hawamdeh, 2003:20; Darroch, 2003:41; Kakabadse, Kakabadse & Kouzmin, 2003:79). Knowledge management has been defined in many ways, from the deeply academic to merely a new name for what used to be 'information management' (Rusanow, 2003:7).

This lack of an accepted definition is perhaps partly due to the number of disciplines that have contributed to knowledge management thinking, prominent being philosophy, in defining knowledge; cognitive science, in understanding knowledge workers; social science, in understanding motivation, people, interactions, culture, environment; management science, in optimising operations and integrating them within the enterprise; information science, in building knowledge-related capabilities; knowledge engineering, in eliciting and codifying knowledge; artificial intelligence, in automating routine and knowledge-intensive work; and economics, in determining priorities (Kakabadse,

Kakabadse, & Kouzmin, 2003:79). For example, within the definition provided by Wiig (Liebowitz, 1999:1-6), a mixture of disciplinary foci can be found. According to Wiig (Liebowitz, 1999:1-6) 'KM is the systematic, explicit, and deliberate building, renewal, and application of knowledge to maximise an enterprise's knowledge-related effectiveness and returns from its knowledge assets'. Within this definition the perspectives of economics, in relation to maximising returns from knowledge assets; management, in relation to an enterprise's knowledge-related effectiveness and knowledge engineering and information sciences, in relation to 'systematic, deliberate building, renewal and application' can be seen to be present.

Beckman (Liebowitz, 1999:1-6) provides further evidence of the range of knowledge management definitions that can be found in the literature. Although each of the seven definitions noted by Beckman have been expressed in a slightly different way, all have two themes in common, 'returns' and the 'capturing and sharing of expertise'. From the definitions given 'returns' are expressed in a number of ways and include payoff; the enabling of best decisions to be made; creation of value and to fulfil the organisations' objectives. To enable these 'returns', the capturing and sharing of expertise, as given in these definitions, incorporates a number of themes including; understanding knowledge; finding knowledge; distribution of knowledge; forms of knowledge; renewal of knowledge; building knowledge; availability of knowledge and application of knowledge.

3.2.1 In Conclusion

It is clear from a brief analysis of the above definitions that knowledge management is intended to, in some way, benefit organisational performance through the identification, capturing, organising and leveraging of knowledge. However, this would suggest that there is a need to understand what constitutes knowledge and how it is then identified, captured, organised and used. If an organisation wishes to capitalise on the knowledge of its employees then it needs to understand how individuals acquire their knowledge, that is, how they learn. Through understanding how employees learn there is the potential for the

organisation to consider how that learning is enabled or inhibited and to consider methods that better enable learning and thereby benefit organisational performance. But what do we mean by knowledge and how does it differ from information?

3.3 Knowledge

3.3.1 Knowledge and its origins

Kakabadse et al (2003:75) provide us with an overview of knowledge and its origins. Although the knowledge debate has seen a re-discovery in the last century, specifically within the disciplines of economics, organisational theory and philosophy the study of human knowledge has been a central subject matter of philosophy and epistemology since the ancient Greeks. Plato first defined the concept of knowledge as 'justified true belief' and this definition, according to Nonaka and Takeuchi, (1995) 'although imperfect in terms of logic has been predominant in Western philosophy'. Authors such as Dretske, Lave and Blacker (Kakabadse, 2003:77) have interpreted Plato's 'justified true belief' to be 'that which people believe and value on the basis of the meaningful and organised accumulation of information (messages) through experience, communication or inference. This needs further exploration and clarification but it would seem to suggest that knowledge is an outcome of information and suggests that knowledge and information are linked.

3.3.2 Defining knowledge and information

The literature provides us with no consensus as to a definition of knowledge. Dictionary explanations, for example, that provided by the Chambers Concise Dictionary (1991):

'n. that which is known; information, instruction; enlightenment, learning; practical skill; assured belief; acquaintance',

do not provide a definition per se, but give us more of an indication of some of the terms that can be found in the literature to categorise 'aspects' of knowledge. In other words, each of these terms does not 'individually' appear to adequately convey the full conceptual meaning of 'knowledge'.

In defining information Chambers quotes:

'n. intelligence given; knowledge

This definition of information is not any clearer than that provided for knowledge but as each definition refers to the other, one could pre-suppose that they are synonymous. According to Kakabadse (2003: 76), and Marchand, (1998: 255), the terms 'knowledge' and 'information' are often used interchangeably in the literature.

Jashapara (2005:138) suggests that the reason that information and knowledge are often used interchangeably is that some scholars have misguidedly assumed that knowledge purely refers to 'explicit' knowledge that can be neatly packaged, classified and transferred across an organisation. If knowledge and information are not synonymous, how do they differ?

In an effort to aid the defining of knowledge a number of authors (Al-Hawamdeh, 2003; Kakabadse et al, 2003; Gottschalk, 1999; Marchand, 1998) distinguish between 'data', 'information' and 'knowledge'. Most authors agree (although terminology may vary slightly) that

- Data is expressed as facts, images or sounds.
- Information is formatted, filtered and summarised data
- Knowledge is instincts, ideas, rules and procedures that guide actions and illustrations.

This, however, does not take us any further in our exploration of 'information as knowledge' and 'knowledge' itself. The relationship between data, information

and knowledge is made clearer when we consider the proposal that knowledge can be organised into hierarchies. Beckman (Liebowitz, 1999:1-5), suggests that

- Data facts, images or sounds (+ interpretation + meaning =)
- Information formatted, filtered, and summarised data (+ action + application =)
- Knowledge Instincts, ideas, rules and procedures that guide actions and decisions

Essentially what is being said here is that data becomes information when the reader of the data is able to interpret that data, to add meaning to the data. Information becomes knowledge when it is taken and applied by the reader to another situation or scenario.

However, although helpful in distinguishing between data, knowledge and information, this also implies that not all data can become information, as to become information there is a reliance on the ability of the reader to be able to interpret that data, to be able to see the connections between the pieces of data. (Does this not also rely on knowledge?) It also follows that not all information becomes knowledge as it depends on the reader's ability to be able to apply (what they have learned) from the information to another situation. Learning would appear to be implicit within the above hierarchy, 'competent learners are said to be those who can apply acquired knowledge to solving problems and adapt existing knowledge to the demands of new, unfamiliar problems' (Rowbotham, 2004:26). In addition, is this ability to apply what is learned (new knowledge) from the information to another situation dependent upon context? Marchand (1998:255) attempts to clarify the relationship between data, information and knowledge in terms of context. 'Data are context free, e.g., an email distributed to all employees in a company is just data to those who share no context for its interpretation. Information can never be context free and includes all the documents and verbal messages that make sense or that can be interpreted by organisational members'. Furthermore, Marchand (1998:255)

notes that, 'information always encompasses an act of transfer or sharing among people' (*information exchange*). Knowledge, on the other hand, is personal.

3.3.3 In Conclusion

All of this suggests that knowledge is 'something' that is personal, that can be affected by a range of variables from what we know now, to what we can learn and apply from our past and future experiences, and that this learning and application is likely to be influenced by, or dependent upon, context and our interpretation of that context. However, it also suggests that knowledge relies on information for knowledge development. According to Davenport et al (Gottschalk, 1999: 203) 'knowledge is information combined with experience, context, interpretation, and reflection'.

3.4 Defining Knowledge and Information in the Context of Organisations

Within the context of organisations and knowledge management, we find a range of knowledge definitions. Beckman, (Liebowitz, 1999:1-3) provides us with six definitions of 'knowledge'. These range from 'seemingly' straightforward practice-based wordings such as those postulated by Woolf and Turban (Liebowitz, 1999: 1-3), to more conceptual definitions such as those offered by Wiig and van der Speck and Spijkevert (Liebowitz, 1999: 1-3). Knowledge, according to Woolf, (Liebowitz, 1999:1-3) is 'organised information applicable to problem solving'. This is further expanded upon by Turban, (Liebowitz, 1999: 1-3) who defines knowledge as 'information that has been organised and analysed to make it understandable and applicable to problem solving or decision making'. Wiig, (Liebowitz, 1999: 1-3) suggests that 'knowledge consists of truths and beliefs, perspectives and concepts, judgements and expectations, methodologies and know-how'. Similarly, van der Speck and Spijkevert (Liebowitz, 1999: 1-3) define knowledge as 'the whole set of insights, experiences and procedures that are considered correct and true and that therefore guide the thoughts, behaviours, and communications of people'.

Definitions of knowledge within the field of knowledge management can be broad or narrow, as the aforementioned suggest and in themselves, serve as indicators as to the complexity of 'knowledge'. This complexity of definition is considered by Sparrow (1998: 24) who suggests that, in the context of actions or decision-making, that the term 'knowledge' is not really broad enough to cover all aspects of 'mental material' that are used as sources of information in a particular action or decision'. Opinions and facts held, personal memories, skills and tacit feel are given as forms of mental material contributing to our actions and decisions. On the other hand Sparrow (1988:24) suggests that 'knowledge' can be considered too broad when considering, e.g., the performing of a task, suggesting that what we mean is that the person performing the task has used 'some' of their knowledge.

All of these definitions are useful, if complex, for their identification of the concepts attributed to 'knowledge' such as truths, beliefs, perspectives, judgements, expectations, methodologies, know-how, reasoning, insights, experiences, procedures, contexts, and expert insights. A much simpler definition is provided by Fahey and Prusak (Gottschalk, 1999: 203) who define knowledge as 'what a knower knows; there is no knowledge without someone knowing it'. 'Knowledge therefore must be viewed as originating 'between the ears' of individuals'. Marchand (1998: 255) as noted above supports this stating that knowledge differs from information in that it resides in people; it is always personal. Gottschalk (1999, 204) suggests that by taking this literally, the need for a knower raises profound questions as to whether and how knowledge can exist outside the heads of individuals. Orna (1999), and Alavi and Leidner (1999) support this epistemology as they purport that information becomes knowledge once it is processed in the mind of an individual but that this knowledge then becomes information again once it is articulated or communicated to others in the form of text, computer output, spoken or written words or other means. Simply expressed 'whereas it is possible to articulate information, knowledge is tacit' (Marchand, 1998: 256). Wilson (2002:4) further supports this view suggesting that knowledge involves the mental processes of comprehension, understanding and learning that go on in the mind. 'Whenever we wish to express what we know we can only do so by uttering messages of one kind or another, oral,

written, gestural...and that such messages do not carry knowledge but information, which a knowing mind may assimilate, understand, comprehend and incorporate into its own knowledge structures’.

However, this does not suggest that information and knowledge are as easily separated as the above might suggest. It is more likely that at any stage in knowledge development one is utilising a mixture of tacit and explicit knowledge. This has been referred to as the ‘duality of knowledge’ (Hildreth, & Kimble, 2002). Hildreth and Kimble (2002:15) suggest that if ‘we view knowledge as a duality then by implication, all knowledge is to some degree both hard (explicit) and soft (tacit): it is simply that the balance between the two varies’. An example of where both hard and soft knowledge are posited as being present is in relation to know-how. Kogut et al (1997:20) distinguish between 2 categories of knowledge, ‘information’ and ‘know-how’. They state that ‘knowledge as information implies knowing what something means, and that know-how, as the compound words state, is a description of knowing how to do something’. Know-how however, is not purely tacit as it is likely to have an explicit component, for example, procedures are a codified form of know-how that guide people in how to perform a task (Hildreth & Kimble, 2002:6). Furthermore, explicit knowledge will also include tacit know-how as ‘what we normally think of as explicit knowledge has a whole history of culture, conventions of language and cross-referencing of thought that are never made explicit. There is always more that is embedded, implied, assumed and pre-supposed than can ever be externalised and made explicit. In practice, the tacit and explicit dimensions are inextricably interwoven’ (Hildreth & Kimble, 2002:16).

3.4.1 In Conclusion

It is clear from the above definitions that knowledge and information are not synonymous but are inextricably linked. It is also becoming clear that when referring to knowledge there is a need to make it clear what is being discussed and therefore a need to distinguish between explicit (codifiable) knowledge and tacit (soft, personal) knowledge. For the purpose of this study explicit

knowledge is considered to be codifiable knowledge, that is, knowledge that can be expressed, but once expressed it becomes information. Tacit knowledge is considered to be that which cannot be expressed but stems from the mental processes of comprehension, understanding and learning. However, bearing in mind the example surrounding know-how above this study is inclined to favour Hildreth and Kimble's (2002:15) epistemology on the duality of knowledge; that we bring to bear a mixture of both hard and soft knowledge to our activities and that therefore it is likely that both explicit and tacit knowledge contribute to 'knowledge development'.

3.5 Knowledge to Information and Information to Knowledge

Accepting that explicit knowledge is knowledge that can be expressed and once expressed becomes information then an exploration of how information is acquired is dealt with in the main by the body of literature within the Library and Information Science discipline, but what about the acquisition of tacit knowledge? Marchand (1998: 256) suggests that information and knowledge relate to differing behaviours and refers to this as the 'continuous conversion from knowledge to information and from information to knowledge'. Marchand (1998:256) suggests that 'knowledge to knowledge' can involve the sharing of knowledge on a one-to-one basis or in small groups, through, for example, conversation. 'Knowledge transfer is principally an interpersonal process' (Jashapara, 2005:143). During conversations people interact [socialise] through shared language, signs and symbols as well as expressions, facial and physical. Use of metaphors, key phrases and emotions aid individuals in expressing their knowledge and depending on the type of relationships held between individuals, the sharing and development of knowledge is thought to be largely tacit (Marchand, 1998:256). Interaction as a form of sharing knowledge is appealing but is it largely tacit? Through conversations we are expressing aspects of our knowledge and thereby sharing that knowledge in the form of information. Through our use of expressions, physical and facial are we actually sharing our tacit knowledge? Is it not likely that it is through listening to and observing others that we develop or construct an insight (tacit development) into how they behave or how they approach their work? Hildreth and Kimble (2002:10) purport

a clearer and a more acceptable view in the mind of the researcher, 'tacit knowledge is not articulated and shared; the learner actually develops their own tacit knowledge by becoming immersed in the practice itself, under the guidance of a mentor and whilst situated in a particular environment'.

Knowledge to information involves the communication of knowledge, e.g., in the form of documents; information to knowledge involves the interpretation of, for example, information in documents and the seeking of meaning thereby adding to the individual's knowledge bank; and information about information involves accessing information about information or 'meta-information', for example information contained in directories, catalogues, indexes and so forth (Marchand, 1998: 256). All of these concepts involve the use of information and therefore prior research into behaviour in relation to these can be found within the discipline of Library and Information Science. What these behaviours do suggest however is that of being enabled to learn and it is this learning as a result of the use of information that enables knowledge development. This therefore suggests that an exploration of information behaviour should enable a better understanding of how knowledge is developed.

There are, however, a range of potential barriers to the conversion of knowledge to information and through information the construction of knowledge from a knowledge management perspective. Factors that can impact on successful knowledge to knowledge interchange include size of group; too many participants for example can reduce the amount of time one can realistically spend in face-to-face contact with individuals. The time required for conversations is often limited within organisations, staff have busy schedules plus 'organisational culture' might view time spent in conversation as time not spent working. To communicate effectively there is a need for a 'shared language', for language to develop. 'Not only do people of different cultures speak a different language but also the way in which the language is applied varies significantly between cultures' (du Toit, 2003). Simple knowledge transfer also assumes a referential theory of meaning and implies that within organisations, meaning is universal and context is relatively homogenous. 'Yet in practice these assumptions do not hold. Even when knowledge is made explicit

in a codified routine, when it is communicated across group boundaries, some organisational members may not understand it because they apply and interpret this knowledge within different contexts' (Bechky, 2003:313).

Challenges inherent in knowledge to information are 'trust' (Al-Hawamdeh, 2003:98), a need to believe that by sharing one's knowledge, by making it explicitly available, it will not be used against one or 'stolen' (Marchand, 1998: 257). Trust also concerns issues of how and why organisational knowledge may develop as 'trust is considered to be vital for the internal market of knowledge transfer to work effectively' (Jashapara, 2005:143). 'Trust facilitates learning between partners, and decisions to exchange knowledge under certain conditions will be based on trust' (Boussouara & Deakins, 2000:207). However, if experts do not feel safe to disclose information, they may share only parts of their terminologies and conceptual systems. Experts may use the same term for different concepts, use different terms for the same concept, use the same term for the same concept, or use different terms and have different concepts. 'This has resulted in questioning where should organisations begin? What enables knowledge acquisition?' (Politis, 2003:56). Another challenge is that of 'information freezing' (Marchand, 1998: 257), where personal knowledge is captured and 'frozen in time' (Marchand, 1998: 257). Consider the analogy that today's newspaper contains yesterday's news and is by all accounts out-of-date. Knowledge might be current one day but unless it is updated it remains frozen in time.

Through information the construction of knowledge suggests more than reading and understanding. It would seem to indicate a need to recognise that one has an 'information need or a learning need' in the first instance and the then formulation of a strategy or intention for the gathering and discarding of information to meet that need as appropriate. This requires 'meaning' to be assigned to the information found in addition to an evaluation of that information. Marchand (1998, 258) highlights the variable quality of information accessible by people in the workplace, the need to be 'able' to access the information available, identifying a further challenge in the 'usage' and 'accessibility' of information that others have produced.

Information about information brings its own challenges, there is a need to 'know' what resources are available within and out with the organisation to meet differing needs. Linked to 'information to knowledge' above, there is a need to be able to understand how and where to 'access' a potentially diverse range of resources.

3.5.1 In Conclusion

It is becoming clear that there are a number of factors that can be said to impact on the enabling of knowledge development: 'learning', 'knowledge sharing', 'organisational culture', 'language', and 'trust'. In addition it is becoming clear that a knowledge of 'information resources' and how to 'access' or 'use' these information resources can also have an impact on knowledge development. How information is managed is therefore of importance to the success or otherwise of knowledge development. In addition, individuals themselves have a role to play in the identification, use and processing of that information. An individual needs to be able to identify that they have an 'information need', (a learning need), plus the ability to identify and exploit resources available to meet that need and ultimately to be able to process and use the information identified to enable knowledge development. This would suggest that an individual's information behaviour is an important part of the knowledge development process, of the learning process. But how do people learn and what influences that learning?

3.6. Learning

3.6.1 Workplace Learning

As noted above, it is difficult to talk about knowledge without talking about learning.

'Through learning we re-create ourselves. Through learning we become able to do something we never were able to do. Through learning we re-perceive the world and our relationship to it' (Senge, 1990:14).

But what do we mean by learning? There is some confusion within the literature surrounding workplace learning as to what is being referred to. For example, a review of the literature on workplace learning carried out by Fenwick (2006) identified that there is a common tendency to refer to workplace learning as both product and process, where product can be suggested as ‘outcomes’ (Fenwick, 2006:270) and process as an ‘individual’s development’ (Fenwick, 2006:271). Where some studies clarify which they are referring to, many talk about process and product as if one concept, whilst others might only refer to learning as an outcome of a process (Fenwick, 2006:270). For the purposes of this research workplace learning is considered to be an ongoing condition of practice based process, as posited by Hager (Fenwick, 2006:270), within the workplace environment. This is in line with the concept of learning as discussed above in relation to the development of knowledge; to be that which the learner develops by becoming immersed in practice whilst situated in a particular environment. This is not to say that outcome is ignored, as there are likely to be outcomes as a result of practice based processes, however, these outcomes may change as a result of these practised based processes being an ongoing condition. Therefore, it is considered to be useful to be able distinguish between process and outcome for the purposes of interpretation and discussion.

3.6.2 Influences on Workplace Learning

‘It is widely acknowledged that a great deal of work-related learning occurs informally, socially, and on the job’ (Poell, Ferd & van der Krogt, 1997:181). Trainee solicitors, the subject of this study, undertake a training contract, regulated by The Law Society (2005), within a workplace environment. What they are expected to learn will therefore be strongly influenced not only by The Law Society requirements but by the experiences afforded them within and of the workplace environment. This suggested relationship between the learner and the environment has been highlighted by researchers into adult education, where learning is suggested as being ‘not just a psychological process but is intimately related to that world and affected by it... People take on the knowledge, values, beliefs, and attitudes of the society in which we live’ (Casey, 2005:132). This

would suggest that the culture of the organisation within which one is situated will influence learning and how that learning takes place (Lewis, 2002:282; Beijerse, 1999: 103). 'Not only are individuals and organisations part of interconnected learning systems, but the knowledge and skills to be learned are social products' (Casey, 2005:132). This interconnectivity between organisations and learners and the social nature of learning would appear to suggest that any examination of learning within the workplace is context bound, that is, what is discovered about learning within the context of one organisation is situated in and bound up with the practice and social and cultural settings of that organisation (O'Donoghue & Maguire, 2005:440). Functional context and social context are therefore key features in knowledge construction. The process of knowledge construction is considered to work most effectively when it is embedded in a context in which new knowledge and skills will be used (Kerka, 1997:1). Furthermore, research on thinking and learning reinforces the idea that people learn through the interaction with others and that although learning is a matter of personal and unique interpretation; it takes place within the social context (Kerka, 1997:1).

3.6.3 Prior Experience

It is likely, however, that learners will also bring to the workplace prior experiences, for example, from education and their every-day lives. 'Adults accumulate an increasing reservoir of experience that becomes an increasingly rich resource for learning' (Merriam & Caffarella, 1999:222). According to Kolb (1984:27) 'knowledge is continuously derived from and tested out in the experiences of the learner', and would suggest that knowledge is constructed as a result of these experiences, past and present. Indeed constructivists believe that 'learners construct their own knowledge from their experiences' (Doolittle, 1999:2). As Billett (Kerka, 1997:1) states, 'the theory of constructivism rests on the notion that there is an innate human drive to make sense of the world. Instead of absorbing or passively receiving objective knowledge that is out there, learners actively construct knowledge by integrating new information and experiences into what they have previously come to understand, revising and reinterpreting old knowledge in order to reconcile it with the new'. This would

suggest that individuals could bring to a current learning situation old knowledge and past experiences not necessarily acquired within the current environment. For example, individuals might bring prior experience from a previous workplace environment and, or, of the subject of the workplace environment from education. However, if, as Stein (1998:1) suggests, 'that knowledge is acquired situationally and transfers only to similar situations', then this would suggest that what knowledge or prior experience an individual brings to a current situation must have some similarity to that current situation, to enable the individual to recognise its relevance to the current situation. 'the basic processes of learning entail the successful enmeshing of new information with existing knowledge and the building of new concepts on the basis of other, already understood concepts' (Ford, 2004:209).

In relation to the types of knowledge individuals construct Billett (Kerka, 1997:1) states that the cognitive structures that learners build include procedural knowledge, the 'how', that includes techniques, skills and abilities, and propositional knowledge, the 'that', that includes facts, concepts and propositions. Here we can see a link with Hildreth and Kimble's epistemology discussed above, where knowledge is viewed as a duality; where both tacit (soft) and explicit (hard) knowledge work together; where an individual brings to bear their past experiences to their current situation. In essence, when constructing and reconstructing knowledge based on past experiences coupled with the new experiences and information that one is faced with, there must be some knowledge and experience that one can express and some that one cannot. As Hildreth and Kimble (2002:16) suggest 'there is always more that is embedded, implied, assumed and pre-supposed than can ever be externalised and made explicit'. However, this does raise the question of whether we are always able to express how we came to know something. Plus it is likely that our memories will also play a role in our ability to bring to bear the appropriate prior knowledge, as required, to any situation.

3.6.4 Memory

Memory has been studied from an information processing approach where the mind is likened to a computer, with information being entered, stored, and then retrieved as needed (Merriam & Caffarella, 1999:196). Three categories of memory have been traditionally used to describe where people store or file what they learn: sensory memory, short-term memory, and long-term memory (Merriam & Caffarella, 1999:197, Entwistle, 1981:136, Lindsay & Norman, 1975:67). Sensory memory holds incoming information long enough to enable preliminary cognitive processes (Merriam & Caffarella, 1999: 197) and is the memory structure that holds for a fraction of a second a complete image of whatever aspect of the environment happens to be our focus of attention (Entwistle, 1981:136). This memory consists of images, sounds, and vibrations, identified through our primary senses of vision, hearing, and touch. However, not all of the image held will necessarily be remembered. 'Sensory memory has a very brief storage time of only milliseconds before it either enters our working memory system or is lost' (Merriam & Caffarella, 1999:197). What appears to happen is that information from the sensory image is compared with our existing knowledge base, and where patterns are recognised these are then transferred into our short term memory (Entwistle, 1981:121). The short-term memory therefore does not hold a complete image of the event that we have focussed our attention on but our immediate interpretation of that event (Lindsay & Norman, 1975:68). However, our short-term memory is also limited in size and unless we rehearse or keep repeating a piece of information, such as a telephone number, it will not remain in our short-term memory for very long (Lindsay & Norman, 1975:69). Therefore, in order for any information held to be retrieved at a later date it needs to be transferred into our long-term memory. However, information stored in long-term memory is 'rarely stored exactly as it was received, that individuals tend to remember the 'gist' of what they see and hear rather than word-for-word sentences or precise images. The materials are organised so that related pieces of information tend to be associated together' (Merriam & Caffarella, 1999:199). But this is not a simple process. According to Lindsay and Norman (1975:71) 'the things that we remember are organised into a complex structure that interconnects the events and concepts built up by past experiences'. This would

suggest that items of information are potentially only processed where an individual has some prior knowledge to be able to make the links. In addition, the 'gist' of what we remember will be influenced by our perceptions and interpretations of the situation at the time. Furthermore, this interpretation and perception of an event might disagree or conflict with what we already know and therefore potentially run the risk of being ignored and discarded rather than processed. According to Ormerod (Merriam & Caffarella, 1999:201) 'storage processes such as meaningful learning and elaboration can occur only to the extent that learners have existing knowledge to which they can connect new material' and 'if this new information is clearly viewed by the person as wrong within the context of what they believe about the world they might sometimes ignore the information altogether'. Linked to prior experience discussed above, according to Dewey (Merriam & Caffarella, 1999:206) 'no-one can think about anything without experience and information about it'. This would suggest that one needs some frame of reference for learning to happen, be it from a prior experience and, or, from any information available.

Long term memory is the most complex of our memory systems (Lindsay & Norman, 1975:70) and can be divided into explicit or declarative memory, what we can explicitly recall, and non-declarative or implicit memory, that which we are not conscious we have (Merriam & Caffarella, 1999:197). According to Merriam and Caffarella (1999:198) implicit knowledge is said to include procedural knowledge in the form of skills and habits. As discussed in section 3.3 above knowledge of procedures was argued as utilising a mixture of tacit and explicit knowledge. Although Merriam and Caffarella talk about implicit it is clear that where procedural knowledge is implied, that is implicit in the procedures being carried out, there is some similarity here to tacit know-how, the knowledge which one has and uses when undertaking procedures, but cannot express. If we are not conscious of our implicit knowledge then how can we express that knowledge? The difference between tacit and implicit would appear to be consciousness. We can be conscious of our tacit know-how but unable to fully express it whereas implicit suggests that we are not aware of having that knowledge in the first place. Whether one talks about implied or tacit, it is clear that when utilising procedural knowledge from our long-term memory there are

aspects of that knowledge which can be expressed and aspects that are inexpressible, whether we are aware of having that knowledge or not.

3.6.5 Community and Mentoring

As learning is social and situated then it can be posited that context provides the setting for examining experience and that the social community provides the shaping of the learning (Stein, 1998:3). The trainees of this research are situated in the context of a legal practice and their social community will be those others who work within that legal practice. 'Through community, learners interpret, reflect, and form meaning. It is the process of interaction with others that produces and establishes meaning systems among learners' (Stein, 1998:3). Community, therefore, provides the setting for the social interaction needed to engage in dialogue with others to see various and diverse perspectives on any issue (Stein, 1998, Lave and Wenger, 1991). Key members of the trainees' community will be their supervisors who act as mentors. Mentoring is typically defined as 'a relationship between an experienced and a less experienced person in which the mentor provides guidance, advice, support and feedback to the protégé' (Kerka, 1998:1). Mentoring supports much of what is currently known about how individuals learn including the socially constructed nature of learning. For example, a mentor facilitates learning by modelling problem solving strategies; they coach learners using appropriate scaffolds or aids, gradually decreasing assistance as learners internalise the process and construct their own knowledge and understanding (Kerka, 1998:3). But how does one become more of an expert? Cleminson and Bradford (Kerka, 1998:3) identified three types of learning used to aid in this transformation: trial and error, 'sitting next to Nellie', (where an individual is given the opportunity to observe a more experienced colleague), and guided learning. Guided learning is suggested as being the key characteristic of effective mentoring but requires trust. Linked to trust as discussed in relation to facilitating learning between partners and decisions to exchange knowledge in section 3.4 above, trust is also the 'foundation' of the relationship between mentor and protégé (Kerka, 1998:3). Without trust in a mentor it is unlikely that a novice will feel comfortable in trying out their ideas or in expressing their thoughts to that mentor.

Mentoring is also used to socialise protégés into the culture of the organisation. Such cultural competencies are clearly important in work settings if we consider that culture is thought to guide and shape the values, behaviours and attitudes of employees (Wang and Ahmed, 2003:11). Culture is also said to be reflected within the visible aspects of the organisation such as its social environment, and the written and spoken language used by the group (Wilson, 2001:355), and, on a deeper level, it is embedded in the way people act, what they expect of each other and how they make sense of each other's actions (McDermott and O'Dell, 2001:77). Mentoring, therefore, helps expose protégés to the accepted working practices, views, and expectations of the organisation. However, Kerka (1998:4) highlights the danger of how mentoring as a form of socialisation can also be constraining, if the novice is exposed to a limited repertoire of practices, views and expectations.

Linked to the influence that one's community can have on learning is the concept 'conversation'. Conversation is usually thought of as speaking and listening but is suggested by James (Baker, Jensen, & Kolb (2005:417) as involving conceiving and perceiving, and includes all the senses; emotions, feelings, touch, taste and smell. 'From the speakers' perspective, conversation is as much about showing and feeling as it is about telling. From the listeners' perspective, conversation is as much about perceiving as it is about learning' (Baker, Jensen & Kolb, 2005:417). This suggests that through listening to others one can potentially learn, but that this learning will depend on what one perceives the conversation to be about in addition to how one perceives this 'aboutness' in terms of one's own past experiences and how one relates to what is being said and heard. Furthermore, to create understanding through conversation, speaker and listener need to be able to relate to each other. 'Through conversation the individuals in their conversations create together new ways of understanding as they relate to one another' (Baker, Jensen & Kolb, 2005:422). Inequality and space are said to play a role in conversational learning experiences (Baker, Jensen & Kolb, 2005:423). Inequality can be related to hierarchical positioning where one person, of increased hierarchical status, assists the development of another, lower down the hierarchy. For example, 'parents assist children to

become adults, teachers assist students to become capable graduates and colleagues, with the ultimate goal of these relationships being to end the inequality' (Baker, Jensen & Kolb, 2005:423).

Space is concerned with 'making physical space, such as when a manager moves from behind his or her desk to join colleagues around a table; making temporal space, such as when a family sets aside weekly time for family conversation; or making emotional space through receptive listening' (Baker, Jensen & Kolb, 2005:424). Through conversations, therefore, it is possible for people to construct meaning together, and to learn from these constructions but that this learning can be enabled or inhibited by hierarchical positioning and the use of space.

3.6.6 Self-efficacy

Just as community and mentoring can aid in the socialisation of a novice there is also a need to consider the novice's participation in the social learning process. For example, Bandura, (2002) highlights self efficacy as having an influential role in occupational development. He suggests that self-efficacy is mediated by a person's beliefs or expectations about their capacity to accomplish certain tasks successfully, or to demonstrate certain behaviours (Brown, 1999). 'It is concerned not with the skills one has but with judgements of what one can do with whatever skills one possesses' (Bandura, 1986:391). It is suggested that whenever individuals have low self-efficacy expectations of what they can do, this can limit the extent to which they participate in an event and as a result are more likely to give up at the first sign of difficulty. Bandura (Brown, 1999:2) identifies four ways in which self-efficacy is learned and self-efficacy expectations are acquired: performance accomplishments, vicarious learning, verbal persuasion, and physical/affective status. Performance accomplishments are suggested as being related to the manner in which accomplishments are received. For example, if one attempts a task badly and is chastised then this can potentially lead to feelings of low self efficacy, but these feelings of low self-efficacy will depend on how the individual reacts to the chastisement, and whether they attempt to overcome any perceived barriers as a result of this

experience. Vicarious Learning can be linked to mentoring, where one's beliefs are acquired through observation and interpretation of what is being observed. 'In observing the modelling behaviour of others, the learner is able to reflect on past experiences with such behaviour and make meaning of its relevance in a new situation' (Brown, 1999:2). For example, where this modelling reflects success or failure, the observer can learn what behaviour is most appropriate in a given situation (Bandura, 1986:302). Verbal persuasion is concerned with the beliefs held about oneself as a result of the messages conveyed by others (Brown, 1999:2), for example, where encouragement can support work-related self-efficacy, criticism can inhibit it. Physical/affective status can be linked to, for example, stress and anxiety, where learning is optimum when appropriately challenged but under conflicting conditions learning can be impaired (Brown, 1999:3).

3.6.7 In Conclusion

From a constructivist perspective learners actively construct knowledge by integrating past and present experiences and that this learning or knowledge construction is more effective where it happens in context. Context can be both functional, that is, where it is embedded in the context within which the new knowledge and skills will be used, and social, that is, where learning takes place within a social context. Learning is therefore likely to be influenced by the environment within which one is situated and by the people one comes across within that environment.

The community within which one is situated has been found to influence learning in relation to, for example, trust, relationships, how the community approaches learning and mentoring, interpretations of conversations, and the culture of the community. Furthermore, feelings of self-efficacy as a result of performance accomplishments, vicarious learning, verbal persuasion, and physical/affective status all have a potential role to play in the learning situation of the individual. For example, how the performance of an individual is received, what can be learned through observing others, whether one is criticised or encouraged, and

the perceived context of a situation can all further enable or inhibit an individual's learning.

Any knowledge constructed can be tacit, implicit or explicit, and it is likely that in constructing knowledge in context, whether social or functional, that not all knowledge that is being used in these constructions will be consciously recognised, or even where consciously recognised, is not necessarily readily expressible. In other words, an element of what one brings to any context and, or, learns from any context, could be of a tacit nature in addition to that which can be expressed.

Just as knowledge is a complex concept, so is how we develop our knowledge or learn. This becomes even clearer when we consider the relationship of memory to learning and how information is acquired, processed and retrieved from memory to enable learning.

All of this emphasises that workplace learning is situated; situated within its functional and social context and indeed, the concept of situated learning is embedded within constructivism (Stein, 1998, Kerka, 1997). Learning can therefore be seen to be not solely an epistemological process based upon individual cognition, but viewed as being both social and situated (Elkjaer, 2001:439). As learning is social and situated then this suggests that it will be through the experiences that the trainees have within their workplace (situation) and with those with whom they work alongside (social) that will lead to learning.

This analysis of the literature has attempted to place learning in context and to highlight a range of factors that have been found to potentially influence learning. But there is also a need to consider how individuals learn, how individuals transform their social and situated experiences into knowledge. 'Experiential Learning Theory (ELT) emphasises the central role that experience plays in the learning process, the process whereby knowledge is created through the transformation of experience' (Baker, Jenson, & Kolb, 2005:412, Mainemelis, Boyatzis & Kolb, 2002:5).

3.7 Experiential Learning

Consideration of the related but differing experiential learning models of Kolb (1984) and Honey and Mumford (1992) provides some context for enabling an understanding and interpretation of the experiences of the trainee solicitors within this research.

3.7.1 Kolb's Experiential Learning Theory Model

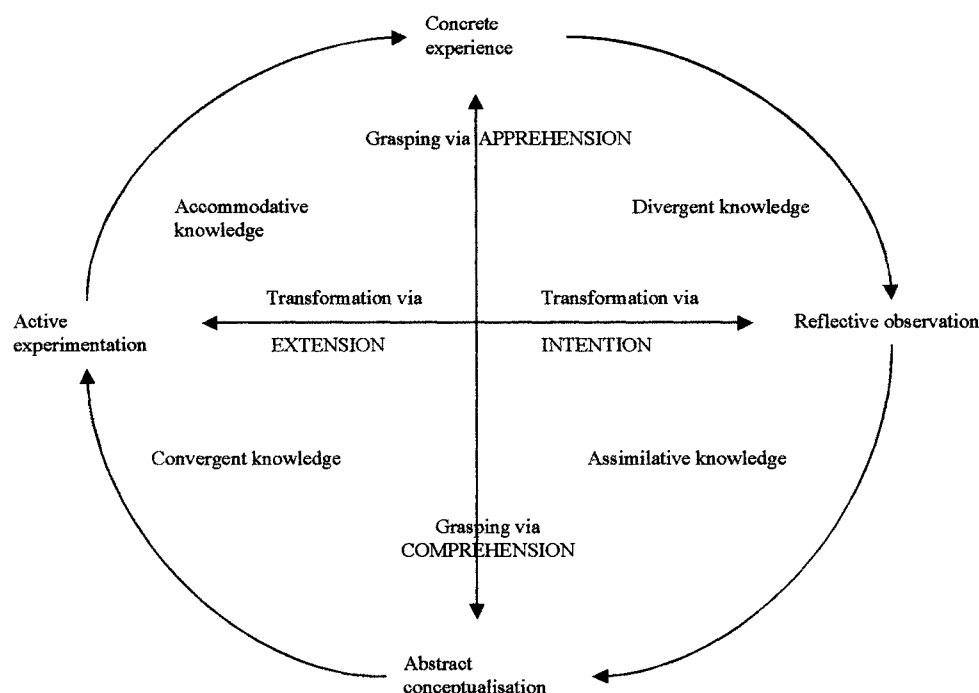


Figure 4. Structural dimensions underlying the process of experiential learning and the resulting basic knowledge forms (Kolb, 1984:42)

Kolb's (Kolb, 1984, Merriam & Caffarella, 1999) multilinear experiential learning theory model builds upon the work of Dewey, Piaget, and Lewin, whose models all suggest that learning by its very nature is a tension and conflict-filled process. 'Learners, if they are to be effective, need four different kinds of abilities; concrete experience abilities, reflective observation abilities, abstract conceptualisation abilities and active experimentation abilities' (Kolb, 1984:30). Kolb portrays these in his model in the form of two dialectically related modes of

grasping experience; the first dimension represents the concrete experience of events at one end and abstract conceptualisation at the other; and a second dimension represents two dialectically related modes of transforming experience; reflective observation at one extreme and active experimentation at the other (Mainemelis, Boyatzis & Kolb, 2002:5).

Kolb's model depicts how 'learning is the process whereby knowledge is created through the transformation of experience, that knowledge results from the combination of grasping experience and transforming it' (Kolb, 1984:42). Four forms of knowledge are represented; divergent knowledge, assimilative knowledge, convergent knowledge, and accommodative knowledge. How experience is grasped and then transformed is suggested as resulting in one of these knowledge forms. For example, experience is presented as being grasped through apprehension and comprehension. Apprehension can be linked to the senses, the sensations or conscious perceptions we experience, for example, in the act of doing something like walking to work. Whilst walking to work you have the sensation of moving your legs and arms, of the ground and whether it is soft or hard, of your shoes, whether comfortable or not; you are conscious of the sights and sounds around you, of the cars and colours and so forth. Although it might be difficult to explain or verbalise all the sensations you experience, you don't generally stop and ponder or think about these sensations, they exist and are 'grasped through a mode of knowing called apprehension' (Kolb, 1984:43), your conscious perceptions. Comprehension is said to be where one 'introduces order into what would otherwise be a seamless, unpredictable flow of apprehended sensations but at the price of shaping (distorting) and forever changing the flow' (Kolb, 1984:43). Comprehension, in relation to the walking to work example, enables you to create or construct that experience, and, importantly, to communicate that experience (Kolb, 1984:43), for example, in being able to relate to someone the route you took and to describe some of the things you saw, heard or felt. However, it is unlikely that you would be able to communicate or describe all the sensations experienced in relation to what you initially saw, heard, or felt, as many of these will now have vanished to be replaced by the senses you are now having, or, you might simply be unable to express all sensations you remember having experienced. Apprehension and

comprehension can be linked to the concept of the duality of knowledge as discussed earlier, where they both have elements of explicitness and tacitness in that one is often able to express some of the sensations experienced but not all. This does not mean however that those inexpressible sensations are always forgotten, however, but that one becomes tacitly knowledgeable.

Memory must therefore also have a role to play. Apprehension can be seen to be linked to sensory memory as discussed above in section 3.6.3 where the sensory memory structure holds for a fraction of a second a complete image of whatever aspect of the environment was our focus of attention. Comprehension can be linked to short and long-term memory structures whereby our short-term memory, although not holding a complete image of the event that we have focussed our attention on, holds our immediate interpretation of that event. However, as our short-term memory is also limited in size, in order for any information held to be retrieved at a later date it is transferred into our long-term memory. As noted above, however, information stored in long-term memory is rarely stored exactly as it was received, but that we tend to remember the 'gist' of what we see and hear.

Kolb (1984:51) links apprehension and comprehension to the transformation processes of 'extension' and 'intension'. Largely consistent with that of Piaget, extension is linked to behavioural actions that transform objects or states, and intention to intellectual operations that are internalised actions or systems of transformation (Kolb, 1984:52). 'Learning, the creation of knowledge and meaning, occurs through the active extension and grounding of ideas and experiences in the external world and through internal reflection about the attributes of these experiences and ideas' (Kolb, 1984:52).

Experience grasped through apprehension and transformed through intention results in what is referred to as divergent knowledge (Kolb, 1984:42). A divergent learning style, therefore, emphasises concrete experience and reflective observation with the emphasis in this orientation being adaptation by observation rather than action (Kolb, 1984:77). 'Divergent thinking has been linked closely to creativity as it entails generating links between relatively wide-ranging

disparate items of information' (Ford: 2004:193). Experience grasped through comprehension and transformed through intention results in assimilative knowledge (Kolb, 1984:42). An assimilative learning style emphasises inductive reasoning and the ability to create theoretical models, in assimilating disparate observations into an integrated observation and is linked more to ideas and abstract concepts (Kolb, 1984:78). When experience is grasped through comprehension and transformed through extension the result is convergent knowledge (Kolb, 1984:42). A convergent learning style relies primarily on the dominant learning abilities of abstract conceptualisation and active experimentation with its greatest strengths lying in problem solving, decision making, and the practical application of ideas (Kolb, 1984:77). Convergent thinking is associated with more 'logical' forms of thought with relatively more narrowly focussed information processing (Ford, 2004:193). When experience is grasped by apprehension and transformed by extension, accommodative knowledge results (Kolb, 1984:42). Within accommodative knowledge one tends to focus on doing things, in carrying out tasks, plans and getting involved in new experiences. It is accommodative in that 'it is best suited to those situations where one must adapt oneself to changing immediate circumstances' (Kolb, 1984:78).

More simply put, Kolb's ELT model suggests that 'learning requires individuals to resolve abilities that are polar opposites, and that the learner must continually choose which set of learning abilities he or she will use in specific learning situations. Some people grasp new information through experiencing the concrete, tangible, felt qualities of the world, relying on their senses and immersing themselves in concrete reality (*concrete reflectors*). Others tend to perceive, grasp, or take hold of new information through symbolic representation or abstract conceptualisation; thinking about, analysing or systematically planning, rather than using sensation as a guide (*abstract activists*). Similarly, in transforming or processing experience some tend to carefully watch others who are involved in the experience and reflect on what happens (*abstract reflectors*) while others choose to jump right in and actively start doing things' (*concrete activists*) (Baker, Jensen & Kolb, 2005:412 parentheses added). The ways in which the conflicts among these dialectically opposed modes of grasping

experience get resolved provides an insight into how people can approach learning, how they process information. 'A learning strategy is a particular way of processing information in relation to a learning task. When a particular learning strategy is used persistently in relation to multiple tasks, it may be considered a learning style' (Ford, 2004:192).

3.7.2 Honey and Mumford's Learning Cycle

Honey and Mumford (1992) base their description of the learning cycle on the work of Kolb but use different words to describe the stages of the cycle and the four learning styles. Furthermore, where Kolb tends to focus on how people learn, Honey and Mumford's work explores the stages of the cycle and the four learning styles in terms of what professional people actually do (Honey and Mumford, 1992:4). As such it is a useful addition to Kolb's work outlined above.

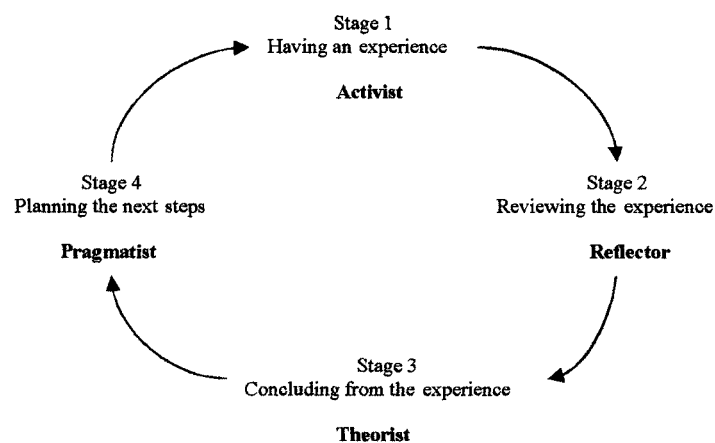


Figure 5. Stages in the learning cycle and learning styles.
Honey and Mumford (1992:7)

Within this model of the learning cycle a learner can start anywhere on the cycle as each stage feeds into the next, for example, someone could start at stage 2 by acquiring some information and considering this information before reaching some conclusions, stage 3, and then deciding how to apply it, stage 4 (Honey and Mumford, 1992:4).

Where Kolb uses the terms concrete experience, reflective observation, abstract conceptualisation and active experimentation, Honey and Mumford refer to these as activists (concrete experience), reflectors (reflective observation), theorists (abstract conceptualisation) and pragmatists (active experimentation). A key difference between the two models would appear to be that Honey and Mumford focus on the individual *being* (an activist, reflector, etc.) in their approach to learning, and Kolb focuses on *how* learning occurs (concrete experience, abstract conceptualisation, etc). Furthermore, where Honey and Mumford attribute learning activities to each learning style, Kolb attempts to demonstrate that learning, and therefore knowing, ‘requires both a grasp or figurative representation of experience and some transformation of that representation, that either the figurative grasp or the operative transformation alone is not sufficient’ (Kolb, 1984:42). Through grasping and transforming experience the resultant forms of knowledge; divergent, assimilative, convergent, and accommodative, indicate learning styles with suggested types of learning activities.

Table 1 below highlights the different approaches.

Table 1. Learning activities, adapted from Honey P. and Mumford, A. (1992) and Kolb (1984)			
Honey and Mumford's Learning Styles	Learning activities that encourage:	Kolb's Knowledge Form Learning Styles	Learning Activities that encourage:
Activists	Thrive on new experiences/problems/opportunities	Divergent	Concrete or real situations Observation
Pragmatists	Trying out ideas, theories and techniques to see if they work. Practical decisions and solving problems	Accommodative	Focus on doing things. Getting involved in new experiences Inductive reasoning
Reflectors	Ability to watch/think/ponder over activities from many different perspectives Ability to consider all possible angles before making a decision Observing others in action	Assimilative	Assimilating disparate observations into an integrated observation
Theorists	Assimilate disparate facts into coherent theories. Analyse and synthesise Logical approach to problem solving	Convergent	Problem solving, decision making, and the practical application of ideas

We can see from this table that there are a number of similarities in the types of learning activities thought to be suited to differing learning styles and knowledge form learning styles. Activists can be seen to have similarities to divergent and accommodative knowledge learning styles in relation to, for example, new experiences and inductive reasoning. Pragmatists can be seen to have similarities to convergent and accommodative knowledge learning styles, for example, in relation to problem solving and decision making and their focus on doing things or trying things out. Reflectors can be seen to have similarities to divergent and assimilative knowledge learning styles, for example, in relation to observation and assimilation of disparate observations. And Theorists can be seen to have similarities to convergent and assimilative, for example, in relation to assimilation of ideas and problem solving.

In addition, both Kolb and Honey and Mumford's work suggest that an individual usually has reliance on, or a preference for, one learning style, but both suggest that the choice of learning style can change or develop. For example, Kolb (1984:76) suggests that 'our hereditary equipment, our particular past life experiences, and the demands of our present environment, mean that most people develop learning styles that emphasise some learning abilities over others'. Honey and Mumford (1992:17) suggest that 'when people change jobs and/or organisations, the altered influences have an affect on learning styles'. 'Present environment' and 'jobs and/or organisations' would also suggest that a person's environment has an influence on learning styles. It is also likely that within the learning environment that those who are responsible for any learning or training programme will have their own preferred learning styles. Honey and Mumford (1992:52) suggest that within an organisational context that those responsible for, or who may help in, the development of learners also need to be able to appreciate the learning cycle and learning styles and identifies bosses, mentors, clients, colleagues and subordinates as having a role to play. Furthermore, each of these participants in the learning process will have their own learning style preferences. However, how often do we reflect on how we learn? 'Where people are unaware or make no attempt to use differences positively, then differences can be unhelpful, for example, a strongly reflector

boss with an equally strongly activist subordinate will initially create a very unhelpful learning relationship' (Honey and Mumford, 1992:53).

3.7.3 Study Approaches

As with the learning styles discussed above, study approaches are characteristic ways in which different individuals approach the task of learning. However they are somewhat broader than learning styles encompassing constructs such as intentions, motivation, confidence and time management (Ford, 2004:194).

A useful overview of study approaches can be found in research carried out by Entwistle (1981) and Ford (2004) that identified three major approaches to learning; surface, strategic and deep. 'All approaches involve a predominant motivation and intention, which contributes directly to the process engaged in by the learner' (Pickard,2002:65). Research by Ford (2004:195) expands upon Entwistle's model to include the affective factors found to be related to process and outcomes, identifying links between 'relatively deep and surface levels of processing and differences in the value students attributed to the resultant knowledge'.

Table 2 Approaches to learning (adapted from Ford, 2004:196, and Pickard, 2002:66)

Approach	Surface (active or passive)	Deep (active or passive)	Strategic and well-organised
Motivation	Completion of task (fear of failure)	Intrinsic Interested in subject Vocational relevance	Extrinsic (intention to excel)
Intention	To reproduce information To fulfil task	To understand information	To be successful by whatever means necessary
Purpose/process	Cognitive: Unrelated memorising Affective: New information is not evaluated in relation to values and attitudes	Cognitive: Relating ideas and evidence Affective: New information is evaluated in relation to values and attitudes	Any of the above as deemed necessary for success
Outcome	Cognitive: Memorisation Superficial understanding Affective: information successfully learned is not personally valued	Cognitive: Deep understanding Integration of facts and principles Affective: 'accepted' information is personally valued and 'rejected' information is not valued	Cognitive: Success with or without understanding Affective: High or low level of personal acceptance of new information

A surface approach to learning is, for example, where an individual is interested in completing a task but in order to achieve this tends to focus only on the pieces of information necessary to do this. 'Learners are very often not aware of any relationship between the atomised and the whole. They have learned nothing about the process of gathering the information and have not engaged in any meaningful interaction with the facts they have produced' (Pickard, 2002:66).

A deep approach is suggested as being where an individual starts with the intention of understanding and attempts to relate the information to their previous knowledge and to personal experience (Entwistle, 1981:77). This approach can involve 'vigorous interaction with the subject and critical analysis of its content' (Pickard, 2002:67).

The strategic approach was added by Marton (Pickard, 2002:67) as being recognised as common amongst learners in a competitive environment, where 'there is a need for learners to be able to adopt both approaches and 'to be

capable of manipulating their approach to fit the reward system as they perceive it' (Pickard, 2002:67). This can be linked to what the individual perceives is required, for example, by the person for whom the work is required, and as a result runs the risk of limiting the learning experience to the needs of others rather one's own.

Fear of failure and intention to excel can to some extent be linked to self-efficacy as discussed in 3.6.5 above where it was highlighted that individuals who have low self-efficacy expectations of what they can do, that this can limit the extent to which they participate in an event and as a result are more likely to give up at the first sign of difficulty. Ford (2004:196) also found links in his information retrieval study between self-efficacy and information behaviour in terms of search efficiency, success, and satisfaction, and, in relation to gender where females were found to be less confident in finding their way effectively around the Internet when compared to males.

3.7.4 In Conclusion

Learning is clearly a complex and conflicting process where in order to be an effective learner one needs to not only have a range of abilities; concrete experience abilities, reflective observation abilities, abstract conceptualisation abilities and active experimentation abilities, but to be able to select the right ability depending on the experience. However, individuals are suggested as having dominant learning styles and depending on their dominant preference will learn best from learning activities that play to that style, for example, activists are said to learn best from new experiences, problems or opportunities, whilst reflectors are said to learn best from activities that enable them to observe, to think and to ponder. Although an individual might have a dominant style it is unlikely that they will always be in a situation that enables them to learn in their preferred style. Past life experiences, the environment, and the preference style of those one works alongside, are also likely to have an influence. What is becoming clear is that having an understanding of differing learning preferences is likely to better enable our understanding of why in some instances individuals do not appear to work well but do so in others; that this could simply be as a

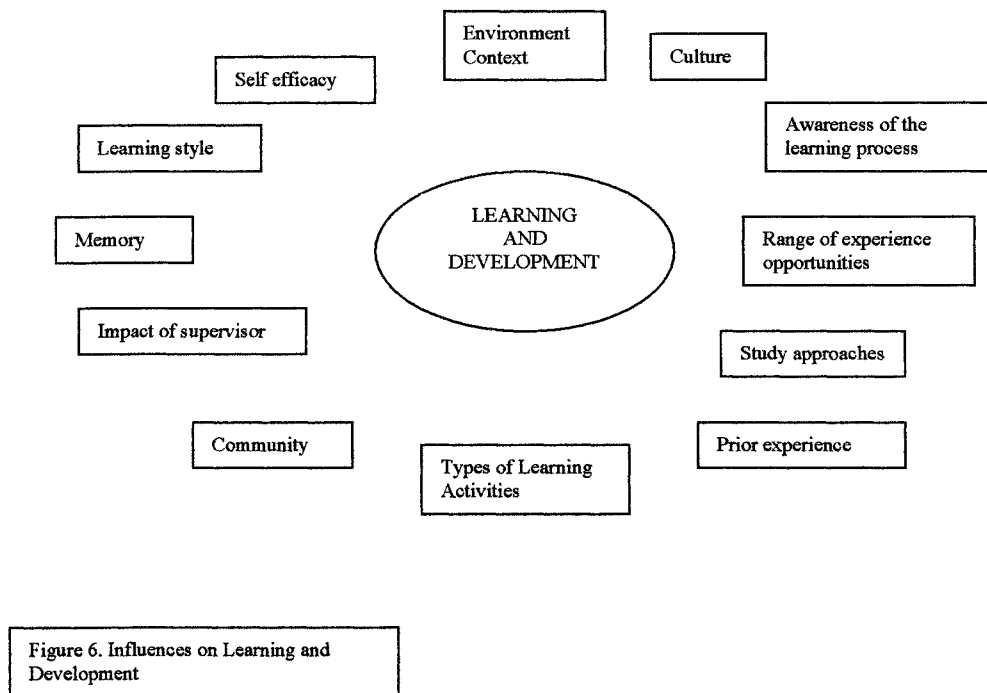
result of their dominant learning style preferences. For example, Honey and Mumford (1992:32) suggest that in relation to a learning activity such as observation or 'sitting next to Nellie' that this is an activity that is liked by reflectors, but requires that they are enabled to discuss their observations later. Activists would also welcome this type of activity but only where they have not already observed a similar event. Theorists would benefit from observation sessions where these sessions are carefully planned, their own participation is structured, and where the observed is considered highly competent. Pragmatists would respond to this type of activity on the premise that they would be involved in planning future observations. Despite one's preferred learning style all would benefit in some way from an observation or sitting next to Nellie type activity, however, in order to get the most out of the activity there are clear differences in how this activity needs to be structured.

Through this brief exploration of experiential learning it is becoming clear that not only are there different experiential learning styles but that the grasping and transforming of experience results in differing forms of knowledge or knowledge learning styles. However, whatever 'mode' of grasping experience learners take 'learners need to discuss, reflect, explore; they are challenged and work on real problems' (Markless, 2004:223). Trainee solicitors undertake their training contract within the context of a 'real', that is, a working law firm, where they will gain practical experience of a range of legal practice areas. As information is a key resource for learning about work, the practices and culture of work (Lloyd & Somerville, 2006:186), a trainees' information behaviour, how, why and when the trainees identify, seek, process, and use information, will therefore shape their learning; contributing to how and what they learn, to their knowledge development.

In addition to an individual's learning style, a consideration of study approaches further links learning to motivation, intention, process and outcome. Here we can posit further links to an individual's information behaviour. For example, during an experience there might be an attendant need and motivation to seek information, to process and use that information to achieve outcomes of relevance to the experience.

3.8 Learning and Information Behaviour from a Constructivist Perspective

This review of the literature, as discussed above, has identified a range of factors as influencing learning. These are highlighted in Figure 6 below.



‘Pedagogic approaches are of particular relevance to information behaviour in so far as they affect the extent to which learners may be expected and encouraged to engage in autonomous information seeking and use’ and ‘such approaches have direct implications for the types of learning objectives and associated tasks that are set for learners. In each case, the nature of the information behaviour that may be appropriate on the part of the learner may differ’ (Ford, 2004:186).

Furthermore, ‘although the importance of contextual distinctions is well recognised in organisational literature and work-learning studies, there is still a tendency to refer to a generic workplace’ (Fenwick, 2006:266). It is useful, therefore, to provide some context for workplace learning in this study. From a constructivist perspective Doolittle reviewed seven frameworks of constructivist pedagogies (Doolittle, 1999:5) and highlighted eight factors considered to be necessary in constructivist pedagogy. These form a useful basis from which to start to consider the factors identified in figure 6 above within the context of the

trainees solicitors which were the focus of this research and for a consideration of the potential role of their information behaviour.

Factor 1. Learning should take place in authentic and real-world environments.

Doolittle (1999:18) suggests that knowledge and skills learned in a specific context are influenced by that context. Trainee solicitors undertake their training contract within the context of a 'real', that is, a working law firm environment, where they will gain practical experience of, and knowledge and skills in, a range of legal practice areas. 'It is only when these skills are applied in more concrete contexts that they are internalised by the learner' (Pickard, 2002:68). Although it is accepted that not all knowledge is situation specific, such as reading, writing and speech (Doolittle, 1999:18), these, in relation to the knowledge and skills surrounding the practice of the law, will be acquired by the trainees within the context of particular legal practice areas, and, furthermore, within the context of particular work matters or experience opportunities. Each learning opportunity within the differing legal practice areas will also potentially require the need for differing information to be sought and used, for a range of differing purposes, and from a range of differing resources. Furthermore, each experience or work matter is likely to be influenced by the trainees' attendant motivation, intention, process, and perceived outcome.

Factor 2. Learning should involve social negotiation and mediation.

According to Vygotsky (Doolittle, 1999:4), 'cognitive development is based on a student's ability to learn socially relevant tools (e.g., hammers, pencils, computers) and culturally based signs (e.g., language, writing, number systems) through interactions with other students and adults who socialise them into their culture'. The trainees work under the mentorship of another solicitor who acts as their guide and supervisor and in this capacity it is through their interactions with the trainees that they are in essence socialising the trainees into the culture of the firm. It is also likely that the trainees, being supervised by a more senior colleague, will seek to discuss work matters with their supervisors and vice versa, with the supervisor acting as mediator between trainee and the work

matter. The community or at least the key players within the community that the trainees are working are likely, therefore, to have some influence on their information behaviour in undertaking work, which in turn will impact on their learning. In addition there is a need for each trainee to come to know the socially relevant tools of each legal practice area within which they are situated, that is, for example, the legal practices, resources and terminology pertaining to these areas.

Factor 3. Content and skills should be made relevant to the learner.

This suggests that there is a need for the work allocated to the trainees to be explained and to be made relevant, that is, to fit within the construct of the trainees' prior knowledge. Research shows that learning proceeds primarily from prior knowledge, and only secondarily from the presented information. Prior knowledge can therefore be at odds with the presented information and consequently the learner could distort the presented information (Ford, 2004:199). This suggests that those responsible for allocating work to the trainees need to be aware of what the trainees already know in relation to the work being allocated, for example, through conversations and discussion. This also suggests, in relation to information behaviour, that the seeking of meaning is potentially a two-way process, the trainee needing to find out what to do, and those responsible for allocating tasks needing to find out what the trainee already knows and to ensure that what they are expected to do is clear and relevant. This also suggests a need for an awareness of differing learning preferences in allocating work to the trainees, to consider how a learning activity can be designed or explained to best enable the trainees to learn.

Factor 4. Content and skills should be understood within the framework of the learner's prior knowledge.

'Knowledge is given meaning as it is related to what an individual already knows, their prior knowledge', and, 'students should not be expected to understand information for which they have insufficient prior knowledge or pre-requisite skills' (Doolittle, 1999:19). As all trainees will have studied law at

University then there is the potential for them to bring what they have learned to their work within the law firm. However, it is unlikely that all trainees will have learned about all aspects of the law whilst at University, where, for example, programmes might offer both core and optional modules. Unless those who are responsible for allocating work are aware of the trainees' existing knowledge then there is the potential for the trainees to be faced with new experiences of which they have little or no knowledge. This is likely to result in a need to be able to seek out information to help them learn, to be able to identify, access, and use resources in order to learn. Here, prior experiences in information behaviour are likely to influence how the trainees approaches any work unfamiliar to them, for example, in how they approach finding out things, what resources they use and how they use them. Memory must also have a role to play, where there is a need to be able to connect their prior experiences to the situation in hand. However, knowledge as a result of prior experience, where coupled with the opportunity to discuss matters with their supervisor, offers the potential for content and skills to be made more relevant and to be better understood within the framework of the trainees' prior legal educational experiences.

Factor 5. Students should be encouraged to become self-regulatory, self mediated, and self-aware.

As the trainees are training to qualify into (usually) a specific legal practice area, potentially with their own set of clients, then any learning should be geared to their becoming independent learners with the appropriate skills and knowledge of that legal practice area. Self-directed learning would also appear to be essential but this requires that the trainees are able to identify what they know and or need to find out or learn, be able to seek information and knowledge to meet these needs, and to be able to interpret and evaluate information and knowledge in meeting their needs. Self-efficacy could prove important here in relation to how individuals view their abilities and therefore whether they are fully able to become self-regulatory, self mediated, and self-aware. As suggested by Bandura (2002) self efficacy has an influential role in occupational development. Furthermore, self-awareness suggests that the trainees will need to be able to

understand how they learn best and potentially to consider developing further those styles that are less dominant.

Factor 6. Students should be assessed formatively, serving to inform future learning experiences.

The trainees will not be assessed as such, but, as they work with or under a supervisor, they have the potential to be offered feedback on their work which can serve to inform their future learning experiences.

Factor 7. Teachers serve primarily as guides and facilitators of learning, not instructors.

Within a law firm environment conventional wisdom suggests that one-to-one, from mentor to trainee, 'on the job' learning is best (Hutchinson, 2006). These mentors can be said to be teachers in that they are in place to guide and facilitate the learning of the trainee; however, this does not necessarily mean that they will not also instruct the trainee as to what to do. According to Doolittle (1999:20), 'Teachers in the cognitivist perspective are usually portrayed as transmitters of knowledge' whereas from a constructivist perspective, 'the role of the teacher is to create experiences for the student to participate in', and it is possible that the solicitors will, in addition to providing experiences for the trainees to learn from, at times also tell the trainees what to do. For example, Hutchinson (2006) suggests that mentor to trainee learning takes no account of the pressures faced by that mentor to deliver speedily and to the highest quality, and as such could result in the mentor, through transmitting their knowledge of the process, dictate to the trainee how things should be done rather than enabling the trainee to learn from the experience of 'doing'.

There are also a number of further risks identified in relation to mentor-trainee relationships in facilitating learning. For example, according to Hutchinson (2006), the quality of mentoring depends heavily on the personal skills and training of the mentor. 'Mentoring is also a skill which even the best lawyers may not possess' (Hutchinson, 2006). Solicitors are not teachers and depending

on the mentor training offered them by the firm, might not be aware of learning theory or the learning process, that is, how individuals learn. In addition, solicitors as mentors will have their own learning style preference and imposing that style upon the trainee. Hutchinson (2006) also suggests that mentoring can be isolating for the trainee, descending into 'war stories', rather than learning experiences.

Factor 8. Teachers should provide for and encourage multiple perspectives and representations of content.

This suggests that the trainees should be exposed to knowledge and information in various forms and from various perspectives. As part of their training the trainee has the potential to be exposed to, and to learn from, a range of differing work experiences. Through these experiences the trainees have the potential to be exposed to a range of perspectives and resources; from solicitors, clients, client files and legal texts etc, but this exploration is potentially dependent upon what guidance has been provided in addition to the trainees' knowledge and interpretation of these resources. Furthermore, their knowledge of, and their ability to use resources, will be partially as a result of their prior experiences, for example, within the working community and in education.

3.8.1 In Conclusion

Each of the eight constructivist pedagogical factors outlined above begin to provide some context within which to consider how the trainees might be enabled to learn and their potential influences on a trainee's information behaviour. There is a need however to look in more depth at research into Information Behaviour itself and how it relates to knowledge and learning.

3.9 Information Behaviour and its Relationship to Knowledge

We have established through a review of the literature that information and knowledge, although not synonymous, are clearly inextricably linked. And although there has been a great deal of research into the importance of

knowledge within the field of 'knowledge management' nothing has been identified to-date specifically regarding 'knowledge behaviour', however, there has been a great deal of research into 'information behaviour' within the field of Library and Information Science. 'Research into information behaviour has occupied information scientists since before the term 'information science' was coined. We can take its origins back to the Royal Society Scientific Information Conference of 1948, since when there have been literally thousands of papers and research reports produced on user needs, information needs, and information seeking behaviour' (Wilson, 1999:250).

Information behaviour is defined as 'those activities a person may engage in when identifying his or her own needs for information, searching for such information in any way, and using or transferring that information' and includes the concepts of 'information need', information seeking', 'information exchange' and 'information use' (Wilson & Walsh, 1996:4). Although the field of knowledge management, as discussed in section 3.2 above, provides us with no single accepted definition of knowledge management, this definition of information behaviour would appear to be of relevance, especially when we consider that all attempts at defining knowledge and knowledge management suggest the need for the identification and sharing of expertise, that is, knowledge, in which information plays a key role. For example, Darroch (2003:41) defines knowledge management as 'the process that creates or locates knowledge and manages the dissemination and use of knowledge within and between organisations and comprises of three parts, knowledge acquisition, knowledge dissemination and the use or responsiveness to knowledge'.

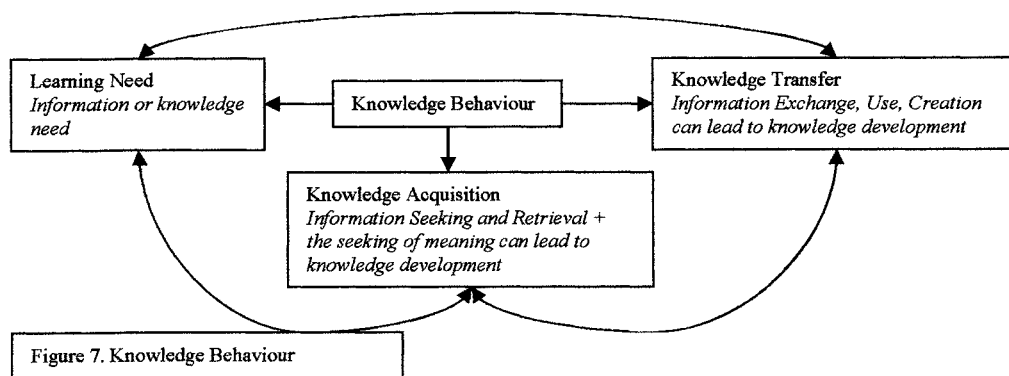
In Darroch's (2003:41) paper knowledge acquisition is given to relate to the location, creation or discovery of knowledge and as such can be said to include information seeking and retrieval. However, the concept of creation within knowledge acquisition needs further explanation and justification as it would appear to this researcher that creation could perhaps be better situated within knowledge use. For example, the creation of new knowledge implies the need to have in the first place acquired and assimilated existing knowledge, which in turn suggests that one has identified a knowledge need and then gone through the

process of seeking out knowledge in an effort to meet the identified need, and finally using the knowledge found as a result of the search process to generate new knowledge.

Knowledge dissemination is simply stated as the dissemination of knowledge around the organisation and can be said to relate to information exchange. The use or responsiveness of knowledge is said to relate to how the organisation responds to the various types of knowledge the organisation has access to and can be said to equate to information use.

What is missing from Darroch's definition when compared to Wilson's is 'need'. Before setting out to locate, create or discover information or knowledge one pre-supposes that there is a recognition of some information or knowledge need in the first place, whether one is fully able to express what that need is or not.

Neither definition explicitly considers 'learning' although it is clear when defining information and knowledge (2.2) above that learning is significant to these concepts. Marchand (1998:253) supports this noting that 'knowledge and information are critical factors for learning'. Perhaps through combining the two definitions and by explicitly considering learning we can more clearly label the concepts to be used in terms of knowledge behaviour, implicit within which is both information and knowledge? Knowledge behaviour could be said to consist of: 'a learning need' (information or knowledge need), 'knowledge acquisition' (information seeking and retrieval and through the seeking of meaning as a result of this activity the construction of knowledge), and 'knowledge transfer' (information exchange, use and creation. Information exchange between people will potentially lead to the creation of new knowledge for each individual. The use of information can lead to the further acquisition of knowledge and the then transference of that knowledge from one situation to another).



What about tacit knowledge? If we accept Hildreth and Kimble's epistemology that tacit knowledge is not articulated and shared but that the learner actually develops their own tacit knowledge by becoming immersed in practice, under the guidance of a mentor and whilst situated in a particular environment, then we can posit that tacit knowledge development could take place at both the knowledge acquisition and knowledge transfer stages. For example, where one has a learning need this need is potentially situation specific, that is pertaining to a particular task or problem and this need could be met through the seeking of information and meaning from human resources. As a result, is one not potentially becoming immersed in practice and being guided by these people, and that through this process is it not possible that one develops one's own tacit know-how from the situations encountered?

The concepts of information behaviour would appear to be applicable to the knowledge management processes as defined by Darroch above. There is, therefore, the potential for research in users' *information behaviour* to inform research in knowledge management as to how knowledge is acquired and used by individuals; an individual's knowledge behaviour.

3.10 Information Behaviour

Information behaviour is defined as 'those activities a person may engage in when identifying his or her own needs for information, searching for such

information in any way, and using or transferring that information' and includes the concepts of 'information need', information seeking', 'information exchange' and 'information use' (Wilson & Walsh, 1996:4).

Despite the plethora of papers surrounding information behaviour, the majority of research in this area tends to focus on aspects of information behaviour rather than information behaviour as a whole. Several researchers in library and information studies (LIS) have pointed out the predominance of research on information needs and information seeking in the area of LIS user studies and have expressed a need for the study of information use (Limberg:1999). Similarly, little attention has been devoted to the phenomenon of the informal transfer of information between individuals (Wilson, 1999:251). As the review of knowledge management literature in a previous section has identified that knowledge management is intended to, in some way, benefit organisational performance through the identification, capturing, organising and usage of its knowledge assets, then this suggests that organisations need to learn from this process, and as organisations only learn through individuals (Senge, 1990:139), there is a need to understand how individuals learn. As information is crucial to learning about work processes and practices there is a need therefore to understand the context of work processes and practices, and how, within these contexts, individuals identify, capture, organise and use information in order to learn about work processes and practices. This suggests a need for a more holistic approach to information behaviour rather than focussing on one of these aspects of that behaviour. However, there are few holistic models of information behaviour with the exception of that proposed by Wilson (1999:251), although even this model was originally intended to represent information seeking behaviour (Wilson, 1999:251) But there are a great many information *seeking* behaviour models, some which can be grouped according to level of described processes (level of cognition, level of social behaviour), or according to how complete a picture they present (that is, whether they refer to a particular stage of information acquisition or present a full sequence of related mental and physical activities) (Niedzwiedzka, 2003:3).

3.10.1 Concepts of Information Behaviour

3.10.1.1 Information Need and Seeking

A number of researchers have taken a cognitive approach to information need and seeking. According to Dervin (Yoon, 1998), 'The cognitive aspect of information seeking involves both the certainty and uncertainty aspects of a user need. Certainty refers to what a user knows or what she thinks she knows such as her experience, knowledge, beliefs, goals and plans. Whereas uncertainty refers to what the user is aware of not knowing, thus needs to find out, this is often called an information need or a cognitive gap'.

The general concept of *need* is a psychological concept since it refers to a mental state or states and it is subjective in that it occurs only in the mind of the person in need. The experience of need can only be discovered by deduction from behaviour or through the report of the person in need (Wilson & Walsh, 1996:5). Despite the subjective nature of need (Wilson & Walsh, 1996:5) and the difficulties in designing studies that will reliably measure users' information needs (Eager & Oppenheim, 1996:15), various research has identified types of need considered of significance in Information Behaviour. These include: need in relation to roles and related tasks, (Leckie, Pettigrew & Sylvain, 1996:180); Taylor's (Kuhlthau, 1991:363) levels of need; visceral need, an actual but unexpressed need for information; conscious need, a within-brain description of the need; formalised need, a formal statement of need; and compromised, the question as presented to an information system; Kelly's (Kuhlthau, 1991:363) phases of construction: confusion, doubt, threat, hypothesis testing, assessing and reconstructing; and affective aspects such as attitude, stance, and motivation (Kuhlthau, 1991:363). Wilson (1981) drawing upon definitions in Psychology, proposes that the basic needs can be defined as physiological, cognitive or affective. He further suggests that the context of any of these needs may be the person him or herself, or the role demands of the person's work or life, or the environments (political, economic, technological etc) within which that life or work takes place (Wilson, 1999:252).

It is clear from this that need is indeed a complex issue. In considering a person's information needs it would seem that one should not only view need as being solely cognitive in nature, for example, a recognition of a gap in one's knowledge, but that there might also be additional affective factors that influence a person's identification of, or the following through of, an information need. In addition to considering how a person's role in life or role at work might influence need Wilson (1996:6, 9) identifies the affective factors of motivation, stress and coping. 'Motive may be of general use in the study of information-seeking behaviour since, if we assume that, for whatever reason a person experiences an information need, there must be an attendant motive actually to engage in such behaviour'. In relation to stress he notes that, 'one key situational property that has consistently been found to affect stress is whether the individual has maximum information (predictability) or minimum information (unpredictability) about the events and its effects', and in relation to coping he suggests that 'coping has two major functions, the regulation of emotions or distress (emotion-focused coping) and the management of the problem that is causing the distress (problem-focused coping)'.

Research into the information needs of professionals has identified that professionals often have several roles to play and that each role might suggest differing information needs (Leckie, Pettigrew & Sylvain, 1996:163). Context is clearly of importance here but context is not only of relevance to the information needs of professionals as according to Ford (2004:183) 'there is increasing recognition that in order to understand information seeking (in general) we need to understand the context in which it takes place and which to some extent shapes it'. It follows that one would consider the context of the information need prior to the context of information seeking. Furthermore, Kelly's (Kuhlthau, 1991:363) 'phases of construction' suggest that a person's information need is likely to change as they progress through the search process and therefore the context is also likely to change. This is further supported by Kuhlthau's (1991) empirically tested, six stage Information Seeking Process (ISP) model. Kuhlthau (Ellis, 1997:385) suggests that at each stage of her information seeking process model there are three realms of human experience: the affective (feelings), the cognitive (thoughts) and the physical (actions) which suggest that at each stage the

individual potentially re-considers and re-configures their initial information need, the context of their initial information need. Here we can begin to hypothesise that not only does the individual have a learning need but that learning is happening. This suggestion of considering one's feelings, thoughts and actions at differing stages along the information seeking process, i.e., taking stock of the original information need in light of new findings, would seem to suggest that the individual is learning from their actions and findings at each stage.

Information seeking behaviour has been defined in numerous ways depending on the purpose and methodological perspective of the researcher. For example, information seeking behaviour is said by Wilson (1999:251) to arise as a consequence of a need perceived by an information user, who, in order to satisfy that need, makes demands upon formal or informal information sources or services, which result in success or failure to find relevant information. Although most researchers would not disagree with this, many researchers including Wilson (Burnett & McKinley, 1998:287) present information seeking as a more complex situation, e.g., Burnett & McKinley, (1998:287) see information seeking as 'a complex, constructive process of sense-making intricately connected to the processes of inquiry and learning'. Yoon & Nilan (1999:871) give information seeking as 'a dynamic process of a user making sense that involves cognitive behaviour at the level of individual perception and an associated communicative behaviour at the level of the social context when insight is sought via linguistic means from other sources'. Kuhlthau (1999:361) views information seeking as a process of sense-making in which a person is forming a personal point of view, that the individual is actively involved in finding meaning which fits in with what he or she already knows, which is not necessarily the same answer for all, but sense-making within a personal frame of reference'. These definitions of information seeking behaviour are only a very small sample of those that can be found in the literature. Whilst all have points of similarity in that they consider, for example, sense-making and cognition they are essentially different in their purpose. They do, however, serve to highlight the fact that research into information seeking behaviour is indeed varied. Pickard (2002:56) identified 11 slightly differing models of information seeking behaviour.

Differing studies can also have differing objectives, methodologies, samples and definitions. For example, Yoon & Nilan (1999) took a sense-making approach with the objective 'to empirically describe users' articulations of information need specifications in an interpersonal information seeking interaction incorporating both cognitive (users perceptions of certainty and uncertainty) and linguistic (i.e., topic and comment aspects of user articulation) aspects of information seeking' and takes a descriptive approach. Their sample was a mixture of university library and public library users and graduate students working on projects. Kuhlthau (1999:363) focused on students across universities, colleges and schools, taking a sense-making approach, with the objective to empirically exhibit the affective and cognitive aspects of their information seeking behaviour.

3.10.1.2 Information Processing, Use and Exchange

One of the problems with the information processing aspect of information behaviour is that information processing is considered to be as subjective as information need, and, as with information need, is not directly observable since it takes place in the mind of the individual (Wilson & Walsh, 1996:30). This suggests that information processing is linked to learning and therefore knowledge development. As discussed earlier knowledge exists in two dimensions, explicit knowledge which exists in the epistemological dimension where explication is possible using written or coded formats, while tacit knowledge exists in the ontological dimension (Sun & Scott, 2005:75). However, in whatever dimension knowledge exists the communication of knowledge is largely a transfer of information; the information can be coded, written, metaphorical communication, or even observed behavioural format (Sun & Scott, 2005:75). Here the suggestion is that 'tacit' knowledge, knowledge that exists in one's head, cannot be communicated and transferred, and as such we are really only concerned with the communication and exchange of information. However, tacit knowledge should not be ignored in that, through the use of information, be it reading, analysing, hearing or observing, one is potentially processing that information, transferring 'what one has learned' to one's own knowledge bank, and this knowledge is likely to be at both a tacit and explicit level. Tacit

knowledge is learned directly as tacit knowledge through observation and practice (Politis, 2003:56). If we consider Leonard and Sensiper's (Hildreth & Kimble, 2002:5) view that knowledge can be described as a continuum, that knowledge exists on a spectrum. 'At one extreme, it is almost completely tacit, that is semiconscious and unconscious knowledge held in people's heads and bodies. At the other end of the spectrum, knowledge is almost completely explicit or codified, structured and accessible to people other than the individuals originating it. Most knowledge of course exists between the extremes. Explicit elements are objective, rational and created in the 'then and there', while the tacit elements are subjective, experiential and created in the 'here and now''. We can begin to posit that for example, whilst faced with a knowledge need, one not only tries to find solutions using explicit knowledge but one also brings to bear 'at that point in time' one's past experience, beliefs, and mental models felt to be appropriate to the situation or task in hand, and that one is using or transferring one's tacit knowledge to the situation at the same time as seeking or gathering explicit knowledge. However, if we are saying that tacit knowledge cannot be articulated and transferred to others, that what we are transferring is information but that we might be transferring knowledge to our own knowledge bank, this raises the important question, how as researchers do we know that tacit knowledge is being transferred?

A further potential element is that of information exchange, where one seeks information from another person. Wilson (1981:4) suggests that the use of the term exchange is intended to draw attention to the element of reciprocity recognised by sociologists and social psychologists as a fundamental aspect of human interaction. Wilson further suggests that in terms of information behaviour the idea of reciprocity may be fairly weak in some cases (as when a junior scientist seeks information from a senior but hierarchically equal colleague) but strong in others where the process might actually inhibit information transfer (as when a subordinate person in a hierarchy fears to reveal his ignorance to a superior). This would also suggest that where strong, this notion of reciprocity could also inhibit learning.

In considering research on information use, reference was in the main made to the use of resources during information seeking and not what use was made of the information found. However Kuhlthau's (1991) ISP model explicitly highlights 'presentation', where one can posit that in presenting what one has learned, one is transferring what one has learned through the use of information, taking the knowledge learned and further using it by transferring it into information. In addition, tacit knowledge will have had some bearing on what one presents as having learned if we accept the point made earlier that 'explicit knowledge has behind it a whole history of culture, conventions of language and cross-referencing of thought' (Hildreth & Kimble, 2002:16) or that 'we know more than we can tell' (Hildreth & Kimble, 2002:7). Leckie, Pettigrew and Sylvain's (1996) model uses the term outcomes but suggests these as being that an information need is met and the task accomplished but with no explicit mention of any uses made of that information.

3.10.1.3 In Conclusion

An information need is said, from the cognitive perspective, to begin with certainty and uncertainty, with the individual bringing to bear their existing knowledge, experience and beliefs, what they are certain about, in order to establish uncertainty, what they do not know. However, it is not simply a case of establishing what one needs to know or to find out, research has shown that affective factors such as context, motivation, stress and coping, can potentially influence need and the information-seeking process. Furthermore, information seeking is a complex process and differing studies can have differing objectives, methodologies, samples and definitions. Information processing, use, and transfer brings its own set of questions in relation to information and knowledge, if the processing and use of tacit knowledge is in the mind of the user then how can we tell if it is indeed being processed or used?

3.11 Questions Surrounding Information Behaviour Research

'All research has an underlying model of the phenomena it investigates, be it tacitly assumed or explicit' (Jarvelin & Wilson, 2003:2).

Traditionally, information theorists have paid most attention to the processes undertaken by people when they approach a system, for example, a library or a database for information (Godbold, 2006:1). Jarvelin and Wilson (2003:7) support this, stating that 'the general orientation towards queries posed to an IR system point to a concern with *active search*', which is the focus of most information-seeking models. However, there is a growing body of research that takes a person-centred approach, and there is increasing interest in the 'person in context' (Ford, 2004:769). According to Ford, (2004:769) 'central to the notion of 'context' are the purposes for which information is sought, and according to which the effectiveness of information seeking may be judged'. This would suggest that there is a need to consider more than how individuals approach systems but to also consider the environment a person is situated within, the need for and the purpose of the search for information, and how that search satisfies the need or purpose for which it was carried out. Jarvelin and Ingwersen (2004:1) further suggest that despite the many theoretical models and frameworks proposed for information seeking research, through information systems and their design, to information access by various processes, to work tasks, that the 'focus of theoretical analysis has been in the seeking process: its stages, actors, access strategies, and sources' and 'that work tasks and information retrieval systems have received less theoretical attention as foci of modelling and theorising'. They further suggest that there is limited empirical research 'that relates characteristics of contexts and situations to characteristics of tasks, actors, information, seeking processes, sources, systems and use of information' (Jarvelin & Ingwersen, 2004:2).

An additional issue identified in relation to information seeking research, and particularly in relation to user studies, is that 'information seeking research still seems to be the study of the behaviour that takes place between tasks and information sources, and cannot be theoretically justified as an isolated area' (Jarvelin and Ingwersen, 2004:6). For example, uncertainty or cognitive gap, as discussed above, is the driver of much information behaviour research, where information is sought in response to some problematic task or situation facing an individual (Ford, 2004:769). However, does information seeking always have to be in response to a problematic task or situation? Godbold (2006:7) suggests that

in addition to gathering information for a particular goal, for example to resolve some problematic task or situation, that people also *encounter* information through, for example, routine information gathering or by picking up information by chance in the course of other activities. Furthermore, the seeking of information is not necessarily recognised as an independent activity from one's day-to-day activities. 'Seeking does not always constitute an independent system, or meaningful system, of activities as a focus of attention. At least for many actors engaged in information seeking, it may be an activity that is not considered, if recognised at all, in isolation. They are just doing their work' (Jarvelin & Ingwersen, 2004:6).

People are also thought to respond to information, for example, through 'curiosity' or the 'satisfaction of curiosity' whereby through an initial act of seeking information to satisfy a task, 'curiosity' or the 'satisfaction of curiosity', can lead to further information seeking (Reio & Wiswell, 2000:8). This further seeking of information could potentially be beyond the immediate needs of the task or goal. Godbold (2006:7) supports this notion of people potentially responding to information by seeking more information, and further suggests that people can respond to information by, for example; sharing or spreading information; avoiding or ignoring information; disputing or disbelieving information; or hiding or destroying information.

All of this suggests that information seeking, and the differing ways that individuals acquire information, is potentially much broader than the behaviour that takes place between tasks and information sources, and that information seeking should be studied within the context of work tasks. There are a great many studies into occupational behaviours, with the majority of studies being concerned with scientists and engineers, scholars, professionals, and workers within general occupation categories such as managers (Case, 2002:232). However, Jarvelin and Ingwersen (2004:11) suggest that 'it is not sufficient to perform just job-level analyses; one needs to look into individual tasks, because the latter vary heavily in their requirements for information and typical sources of information even within one job'. They also suggest that 'it becomes crucial to observe general patterns across tasks and contexts' (Jarvelin & Ingwersen,

2004:11). Jarvelin and Ingwersen's (2004:7) conceptual framework for the 'augmenting of tasks', expands the work task situation to provide an image of the processes one might undertake in the performing of a task. This expansion highlights the potential complexity of any task-based research.

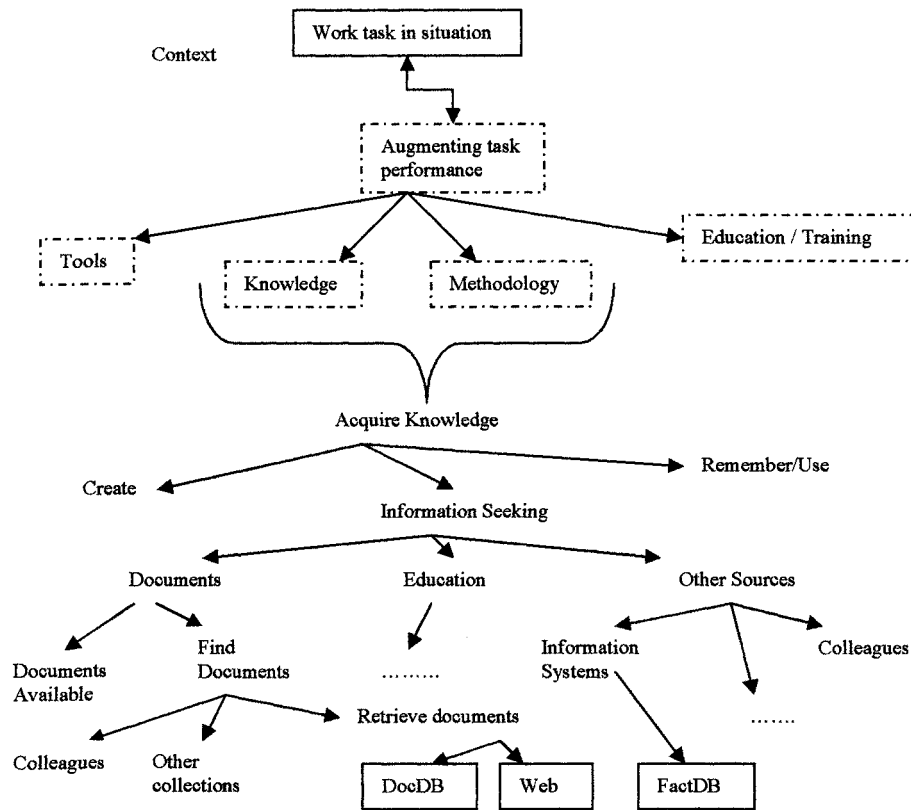


Figure 8. Augmenting task performance (Ingwersen & Jarvelin, 2004:7)

Although Ingwersen and Jarvelin mention information and sources of information, rather than knowledge, or learning as a result of knowledge seeking, it is clear from discussions above that in considering this research that this framework could prove useful. It is potentially useful not only because it illustrates processes in task related behaviour, tasks being an emerging theme from this research, but it highlights the knowledge and learning related factors of education and training, acquisition and creation of knowledge, methodology (if one interprets methodology as being the development of skills, competencies), social aspects (in the form of the environment and colleagues), and memory, in addition to aspects of information behaviour (as discussed in more detail below). There is the potential, for the findings of this research to aid in the

contextualisation of this framework in terms of trainee solicitors and their knowledge behaviour in relation to tasks.

However, it is important to define what is meant by tasks in the context of this research as the literature identified some differing usages. For example, Vakkari (2003:420) identified that tasks have at times been confused with 'search tasks' where within information retrieval these refer to search requests or search topics. Others are identified as referring to 'tasks' in terms of those activities or interests that trigger information searching. For this reason researchers such as Ingwersen (Vakkari 2003:420) 'have begun to refer to tasks as work tasks, not with the intention of restricting it to the work context but to include other activities in its scope'. In this research the term task is used in terms more akin to Ingwersen and refers to all pieces of work allocated to the trainees, and is independent of type, size, or completeness.

According to Oliver and Oliver (1996:519) 'in most instances, an assumed and implicit purpose of information seeking is that some form of learning occurs'. Indeed, Marchionini (Oliver and Oliver, 1996:519) defines information seeking as 'a process in which humans purposefully engage in order to change their state of knowledge, that information seeking is a high level cognitive process which forms an integral part of learning and problem solving'. However, as Oliver and Oliver (1996:520) point out, 'there is a difference between learning and information seeking, while learning is based on information and knowledge acquisition and retention, information seeking does not necessarily pursue or lead to the retention of the information gathered'. This is an important point, and although there are numerous models of information seeking, it is suggested by Limberg (1999:1) that there is still a need for the further exploration of information seeking and use in learning contexts. This is supported by Parker (2001:7) who states that 'the importance of understanding students' information behaviour processes, as they create vehicles for, and evidence of, their learning processes is a vital but under-researched issue' (Parker, 2001:7). Although Parker mentions students, this would also appear to be true of other occupational or role categories. Case (2002) provides a review of a range of occupational information behaviour investigations, including: scientists and engineers, social scientists,

humanities scholars, health care providers, managers, journalists and lawyers. Despite their differing occupational or role contexts, common to all of the research studies reviewed is 'that despite an effort to examine the process of information seeking, much of it still comes down to 'who or what do people consult for information' (Case, 2002:256) This is further supported by Kuhlthau (2004:166) who highlights that 'most studies of information use in the workplace have concentrated primarily on the sources of information used, not on the process of seeking and using information'.

Learning, is not specifically highlighted as a key element. This is not to say that information seeking and learning have not been considered in relation to each other. Traditionally, however, studies have tended to focus on information retrieval and changes in cognitive structures stemming from a 'search task'. Cognitive structures are described as consisting of concepts and their relations, and where an 'actor has insufficient knowledge, and thus insufficient conceptual structure about a task; it implies that he does not have the necessary concepts and links for the phenomenon he intends to understand' (Vakkari, 1999:44). In other words, 'insufficient knowledge refers to the degree a person is capable of connecting a task with his prior knowledge' (Vakkari, 1999:44). Insufficient knowledge suggests a need to find out more or to learn more about a task, however, although reference is made to 'tasks' much of the research in this area is concerning 'search tasks', where research has made connections between, for example, search strategies and the stage of search task performance (Kuhlthau, 1993). Vakkari (2003) highlights a number of research projects which consider how users were found to change their use of terms in the search process as a result of successive searches on a topic, for example, through the discarding of broader and more general terms and the use of narrower and or more specific terms. This would imply that users have learned more about the subject of inquiry as a result of their interaction with the search system. 'It is possible that users learn something about the topic when reflecting on search concepts and judging the relevance of the information items retrieved' (Vakkari, 2003:438). However, Vakkari (2003:438) goes on to suggest that this learning 'is not likely to change the conceptual constructs that represent information needs' but that 'a search interaction may, however, facilitate learning new expressions of

concepts'. This would appear to suggest that, by reflecting on search concepts and on the relevance of items retrieved, one is potentially learning about the topic but that this learning is perhaps not 'deep' enough to change one's initial concept of what is needed.

Research has however, been carried out within educational settings, that explores process and product approaches to information seeking and use in undertaking academic assignments (McGregor, & Williamson, 2005, Limberg, 1999).

Assignments can be viewed as a task as defined above and as such these research investigations are broader than that of search tasks. The findings from Limberg's study (1999) highlight three categories of conception of information seeking; fact finding; balancing of information in order to choose right, (finding enough information for forming a personal standpoint); and scrutinising and analysing, (seeking and using information for understanding a topic), and three categories of conception of subject content of relevance to the topic of assignment. Comparing the two sets of categories indicated that 'the variation in information seeking and use presented in the three categories of description interact closely with variation in ways of experiencing or understanding the content of the information, as presented in the three categories of description of learning outcomes' (Limberg, 1999:17). This would appear to suggest that information seeking; fact finding, balancing of information in order to choose right, and scrutinising and analysing, do suggest learning from the content, in terms of understanding the information found and potentially recognising that still required, in meeting the learning outcomes of the assignment. This would appear to contradict Vakkari's (2003:438) statement above that suggests that despite the potential for learning through reflection on search concepts and through the judging of the relevance of items retrieved, that this learning is not sufficient to change one's original concept of need, that one has not learned from the content in sufficient depth to suggest a need to change one's original concept of need. Indeed, Limberg, (1999:17) concludes from her research that her findings contradict what she refers to as 'the established view of information seeking as a general process regardless of content' and that 'information seeking is *not* independent of the content of information'. Limberg's (1999) findings are in line with Kuhlthau's (2004:94) extensively empirically tested Information Seeking Process model's

focus formulation stage, where 'formulation is thinking, developing an understanding, and extending and defining a topic from the information encountered in a search'. This does suggest that individuals can and do learn from their information seeking processes and from the information encountered as part of this process.

A key finding from Limberg's (1999:17) research was that 'interaction between information seeking and use and learning primarily concern the use of information'. Use also features in McGregor and Williamson's (2005) study where it is tentatively posited, and through further research, supported, that there is a relationship between whether students demonstrated an orientation to processes such as seeking meaning, thinking, and learning, and the way that students used information. However, according to Kuhlthau, (2004:3), 'user studies, which make up the largest single body of research in librarianship, have been constrained by a narrow view of information use. For the most part, information is viewed as a thing or a product to be given out, the right answer and the right source, rather than as an impetus for learning and changing constructs'. 'Learning as a process of active information seeking that is formational, not just informational is the essence of information use' (Parker 2001:6).

However, as discussed in section 3.6.1, it is useful to consider learning not only in terms of process but also in terms of product. Product in information behaviour research could be equated to 'outcome', and is defined by Kari, (2007:3) as 'anything that ensues from the individual's assimilation of a message'. For example, changes in task behaviour could be considered an outcome. However, this outcome could change again as a result of experiences with similar tasks and is therefore both product and process. Kari, (2007:4) suggests that information outcomes can be viewed as passive, where some activity becomes easier as a result of information, what the information does to the person (know-how, potentially tacit and explicit in nature?), and active, where the gained knowledge is consciously used (explicit knowledge?). Whether passive or active, both suggest learning as a result of information.

3.11.1 In Conclusion

All of the above suggests that there is a need for further research that moves away from the traditional approach to information seeking as being problem-centred; focusing on the behaviour that takes place between tasks and information sources, to relating characteristics of contexts and situations to characteristics of tasks, actors and their information behaviour, with information behaviour being broader than need and seeking to include information use. There is also a suggested need for further empirical research that considers information seeking behaviour within learning contexts. If we accept, as highlighted in section 3.6.2 above, that a great deal of work-related learning occurs socially and on the job, then it can be posited that an exploration of the work carried out by the trainee solicitors in this research should provide us with not only a detailed picture of the context and characteristics of their work-tasks, but the characteristics and role of their information behaviour in relation to these tasks and in relation to their learning.

The role of information seeking and learning within the social context becomes clear when we consider organisational socialisation to be ‘a process of formally and informally communicating and transmitting an organisation’s technical job knowledge, culture, norms, and procedures’ (Reio & Wiswell, 2000:9). Employees focus on acquiring the information they need to learn the technical and interpersonal skills necessary for their position and therefore, ‘organisational socialisation is largely an information seeking process that relies on employees taking a proactive role in acquiring the information they need to resolve uncertainties and master the technical and interpersonal skills required for their positions’ (Reio & Wiswell, 2000:9). However, this would suggest more than information seeking, as ‘to resolve their uncertainties about new job settings, the relevant features of those settings, and how to accomplish required tasks, individuals must learn through trial and error, watching, asking, reading and practice’ (Reio & Wiswell, 2000:9), and further suggests the processing and use of information and the development of know-how as forming a part of their learning experiences.

3.12 Information Behaviour of Solicitors

There has been very little published research on the information behaviour of solicitors. Nothing has been identified that endeavours to take a holistic approach and very little research identified as focusing on aspects of information behaviour such as information seeking in relation to lawyers (Wilkinson, 2001:257, Leckie, Pettigrew & Sylvain, 1996:173). Use was made in this study of that research which has been identified as pertaining to lawyers and that were further considered to fit with the research paradigm.

3.12.1 Prior Research Relating to Legal Practitioners

Otike (1999) provides some contextual background in relation to previous studies identified as pertaining to lawyers. Prior research identified includes studies undertaken for postgraduate LLM and MSc dissertations. Although unpublished and despite their 'age' they are considered useful in providing an indication of the coverage of law related behaviour research undertaken to-date. Some studies identified are also useful as they highlight findings of interest to this research. For example, Kidd (Otike, 1999:22) researched the information needs of a sample of solicitors in private practice in Scotland in 1978. His study aimed to consider the information needs and seeking habits of solicitors with a view to identifying how their needs could be solved by the introduction of Computerised Assisted Legal Research. Kidd (Otike, 1999:22) found that 'solicitors operated in an intensive environment' and despite this, 'were not aware of the fact that a substantial amount of their work involved the processing of information in one form or another'. This would appear to further add to the point made above by Jarvelin & Ingwersen (2004:6), who suggest that information seeking may be an activity that is not considered, if recognised at all, in isolation. Here we can posit that individuals might also not explicitly recognise information processing as an aspect of their day-to-day work. Kidd (Otike, 1999:22) also identified that solicitors sought information for two major purposes; to keep abreast of the law, and to assist in solving legal issues'. Interestingly, he identified that despite welcoming the development of an information retrieval system, the solicitors did not feel a great need for this service (Otike, 1999:22).

A more 'user-centred' approach was adopted for MSc dissertation studies by Cheatle in 1992 and Walsh in 1994 (Otike, 1999:23). Cheatle's findings, based on a firm in London, identified that junior lawyers seek information more frequently than more experienced colleagues simply because they are still learning. This is not unexpected but what is interesting is the suggestion that there is a 'research lull among older lawyers' (Otike, 1999:23) suggesting that as lawyers gain experience there is less need to carry out research. Walsh (Otike, 1999:23) focuses on attitudes to information and of potential relevance to this research is that solicitors were identified as delegating legal research because it was cheaper for trainees to do, and 'that the younger generation of lawyers viewed information solely in terms of electronic information'.

Further studies identified by Otike, (1999) focus on; information retrieval systems for employment law, Gelder, 1981; library use in Malaya, Osman, 1987; library use in Michigan, Leary & Cooper, 1981; library use in Philippines, Feliciano, 1984; and Florida judges, Hainsworth, 1992. These are acknowledged in order to illustrate the type of work that has been carried out in terms of law related information behaviour practices but as this research is not specifically concerned with systems for employment law, library usage, or judges, these are not examined in relation to this research.

Otike (1999:24) also highlights a study undertaken by the Department of Justice, Canada in 1972. This was one of the studies on which Leckie, Pettigrew and Sylvain (1996) based their model of the Information Seeking Behaviour of Professionals and is discussed in more detail below.

None of the above studies explicitly indicate the use of any models within their research. However, as one of the objectives of this research is to model the information behaviour of the trainee solicitors it is useful to consider models identified as being of relevance to this research.

3.12.2 Selected Models of Information Behaviour Research

It is commonplace to compare and debate two or more conceptual models when a research area is in transition (Jarvelin & Wilson, 2003:2). Leckie Pettigrew and Sylvain's (1996) analytic model of the Information Seeking Behaviour of Professionals has been selected as an initial framework base. As a general model Leckie, Pettigrew and Sylvain (1996, 188) suggest that it could prove useful in guiding new and emerging areas of research and also as a basis for the re-examination of the information seeking behaviour of professional groups that have already been studied. As no empirical research was identified that takes a holistic approach to the information behaviour of lawyers then it seemed appropriate to make use of Leckie, Pettigrew and Sylvain's general model as a framework base to inform this study and to also consider the critique of this model by Wilkinson (Wilkinson, 2001).

In addition, as this study takes a constructivist approach to inquiry then Kuhlthau's Information Search Process (ISP) model is of relevance in informing the framework of this research. Kuhlthau (Kuhlthau & Tama, 2001:26) considers information seeking as a necessary, but preliminary activity to the more significant endeavour of using information for constructing new knowledge to accomplish the tasks and goals that encompass their work, and thereby fits within both the research paradigm and the research aim of this study. Furthermore Kuhlthau's ISP model has also been empirically tested with various groups of professionals including a small group of lawyers. Kuhlthau, importantly, also draws attention to affective factors, the feelings associated with each stage of the process, an element this research feels to be missing from Leckie, Pettigrew and Sylvain's model. In addition, whereas Leckie, Pettigrew and Sylvain provide a general model of the broad elements identified as depicting the information seeking behaviour of professionals such as roles, tasks, etc, Kuhlthau provides a more contextual and individual approach through presenting information seeking 'as a process of construction with uncertainty decreasing as understanding increases, incorporating the cognitive with the affective experience common in the process of information seeking and use' (Kuhlthau & Tama, 2001:27), thereby adding contextual depth to this study's framework. The six stages of the

ISP are: initiation, when a person becomes aware of a lack of knowledge or understanding and uncertainty and apprehension are common; selection, when a general area or topic is identified, and initial uncertainty often gives way to a brief sense of optimism and a readiness to begin a search; exploration, when inconsistent, incompatible information is encountered, and uncertainty, confusion, and doubt frequently increase; formulation, when a focused perspective of the problem is formed, and uncertainty diminishes as confidence begins to increase; collection, when information pertinent to the focused problem is gathered, and uncertainty subsides as interest and involvement in the project deepen; presentation, when the search is completed with a new understanding of the problem, enabling the user to explain his or her learning to others (Kuhlthau & Tama, 2001:27).

3.12.3 Leckie, Pettigrew and Sylvain's Model of the Information Seeking of Professionals: an overview.

This section provides an overview of Leckie, Pettigrew and Sylvain's model of the Information Seeking behaviour of Professionals with comparisons being made with the findings of Kuhlthau's empirical research into the Information Search Process of Lawyers (Kuhlthau & Tama, 2001) and Wilkinson's (2001) empirical research into the Information Sources Used by Lawyers in Problem Solving.

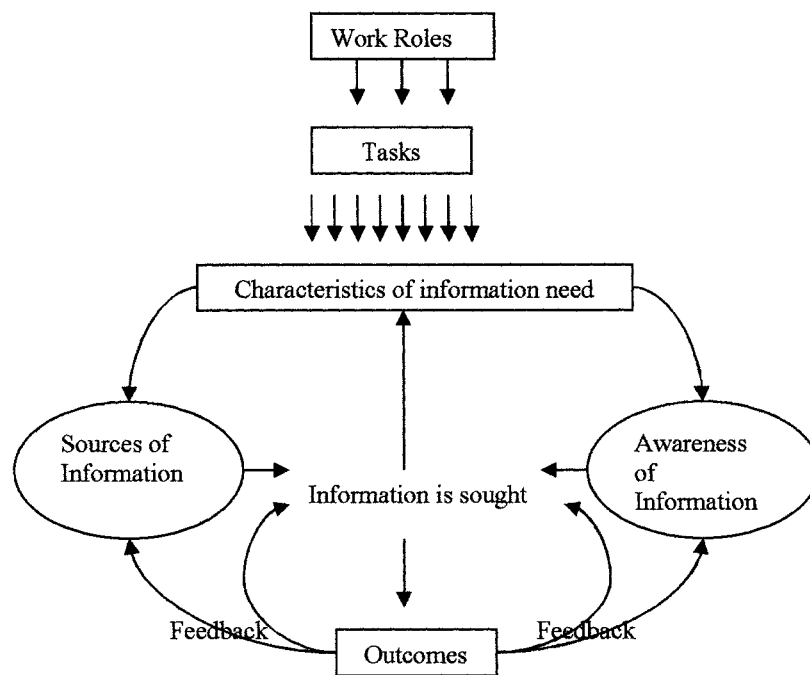


Figure 9. Leckie, Pettigrew & Sylvain (1996:180) Model of the information seeking of professionals

Leckie, Pettigrew and Sylvain's general model as outlined above is as a result of a selective review of the literature on three groups of professionals, Engineers, Health Care Professionals and Lawyers and through a discussion of previous attempts to model the information seeking behaviour of professionals. Through an examination of the citations in their article, prior research used in relation to the information needs of lawyers appears to be in the main that carried out by the Canadian Department of Justice in 1972 and it is therefore useful to further consider the more recent findings of Wilkinson (2001) whose research team interviewed and analysed scripts from more than 150 practising lawyers in Ontario and Kuhlthau's research into eight practising lawyers in New Jersey alongside that of Leckie, Pettigrew and Sylvain's work. Although each study has differing purposes and objectives, Leckie, Pettigrew and Sylvain's to provide a general model, Kuhlthau's as part of an ongoing programme of research based on her Information Search Process model, and Wilkinson as part of a multidisciplinary investigation into the legal profession to provide evidence of the information sources used, all provide insights into the behaviour of lawyers and are of value in informing the interpretation of this research study.

Furthermore, Wilkinson provides a critique of Leckie, Pettigrew and Sylvain's model as a result of her research.

Although Leckie, Pettigrew and Sylvain's and Kuhlthau's models are mainly concerned with 'information seeking' as opposed to information behaviour, both consider the influence of tasks on information need, seeking and use in relation to lawyers. The work of professionals is necessarily more task-oriented, continually requiring the setting and achieving of goals to provide services to clients in the most efficient manner' (Leckie, Pettigrew & Sylvain, 1996:162). Hackman (Jarvelin & Wilson, 2003:9) suggests that a worker's job consists of tasks, which consist of levels of progressively smaller subtasks; that tasks are either given to, or identified by, the worker, and each task has a recognisable beginning and end, the former containing recognisable stimuli and guidelines concerning goals and/or measures to be taken. Task complexity is considered to be emerging as an important, influential factor in information-seeking behaviour in work situations and has been described by lawyers as those involving considerable thinking and formulation using terms indicating the need for considerable construction of a new approach, one that was not readily apparent on the surface or at first glance but needed to be worked out over time (Kuhlthau & Tama, 2001:30). Task characteristics related to complexity are further suggested by Jarvelin & Wilson (2003:9), as being: analysability, a priori determinability, the number of alternative paths of task performance, outcome novelty, number of goals and conflicting dependencies among them, uncertainties between performance and goals, number of inputs, cognitive and skills requirements as well as the time varying conditions of task performance. In relation to task-based information seeking, Bystrom (Jarvelin & Wilson, 2003:15) found that the higher the degree of task complexity, the more probable is the need for multiple information types: first task information, then task and domain information and finally task, domain and [problem] solving information. In addition, increased task complexity fostered the use of people as resources. However, Leckie, Pettigrew and Sylvain, (1996:162) take a broader view than the tasks performed but also consider the range of roles that a professional may have and suggest that within the context of the professional's organisational

situation, the information needed and sought may vary with each role enacted (Leckie, Pettigrew & Sylvain, 1996:162).

According to Leckie, Pettigrew and Sylvain (1996:173) 'although what information is required by a particular lawyer may vary being dependent on the area of law they focus upon, to a greater or lesser extent all lawyers must retrieve, amass, evaluate and use an array of information to serve clients, this activity of information retrieval and use is commonly referred to as legal research'. For example, property is suggested as not requiring the same amount of research or supporting documentation as other areas that are thought to be more labour intensive and expensive such as taxation and litigation. Wilkinson (2001:258) however disputes the suggestion that this need for information will necessarily result in the lawyers engaging in legal research but suggests that individuals who believe that they are already knowledgeable about a topic area will be less likely to search out additional information about that topic. What Wilkinson appears to be suggesting is that as legal research has been defined as 'a carefully constructed process of familiarisation with standard legal reference tools, which are usually consulted in a specific order', the lawyers in knowing their practice area are not necessarily seeking further information on that practice area but are often accessing these known resources to confirm their knowledge, rather than seeking new information leading to new knowledge. Kuhlthau (2001:32) identified several lawyers as clearly seeking further information through research when constructing the arguments for a case; however it can be posited that this is not legal research as defined above and therefore supports Wilkinson's point. But it does suggest that there is a need to define more clearly what is happening when lawyers are, for example, seeking information as part of a task, is it legal research in the traditional sense as defined above or is it much broader than this?

Leckie, Pettigrew and Sylvain (1996:173) further suggest that 'lawyers have several roles to play, identifying those of drafting, advocacy, negotiating and counselling' and that 'each of these roles will result in different activities and that these activities will in turn shape the type of information need'. A fifth role of 'management' was identified by Mayer (Leckie, Pettigrew & Sylvain,

1996:174). In advocacy for example, the lawyer seeks to 'persuade someone what the law should be, or how the law should be applied. This endeavour encompasses a number of tasks, such as determining relevant cases and precedents, necessitating a search of the primary and secondary legal literature. The role of management can be broken down into various tasks involving, for example, the creation and utilisation of information about budgeting, personnel or organisational procedures and so forth'. These roles do suggest that differing types of information are needed, that access might be required to differing resources, and that differing resultant uses might be made of the information. Interestingly, Wilkinson (2001:270) identified only two roles as a result of her research, that of service provider (when lawyers are engaged with the substantive areas of law in meeting their clients' needs) and administrator/manager and that none of the problems raised in her research or through an analysis of calls to the Law Society over a four year period suggested the roles of researcher, educator, or student. However, as Wilkinson (2001, 261) points out, the researcher role for lawyers is in fact an integral part of their role as a service provider and is not necessarily seen as a separate role. This would suggest a need for further clarification of the roles potentially played by lawyers in Leckie, Pettigrew and Sylvain's model and to what extent these roles influence their information behaviour.

Leckie, Pettigrew & Sylvain, (1996:175) highlight a range of factors thought to influence lawyers' information seeking and use including attitude, organisational context, experience, education, and the resources available. While some studies have suggested attitude, in that many lawyers dislike legal research and prefer to farm it out to students and junior lawyers, others have noted that lawyers are often unwilling to delegate information-retrieval activities, since often they do not know exactly what piece of information may be crucial. In an organisational context, lawyers in large specialised firms may have the in-house resources to delegate all or parts of their legal research, while those in small firms may have no choice but to conduct their research themselves. Lawyers with greater experience may be able to draw on their own professional knowledge to a greater extent or may be able to refer the case to a colleague, thus eliminating the need for certain kinds of legal research (which would appear to agree with

Wilkinson's point above). Some law schools are concerned that lawyers are not receiving adequate training in legal sources and information-retrieval strategies; and the resources available to them, the lack of comprehensive and user-friendly finding aids and retrieval systems for legal materials. This last factor is supported by Kuhlthau's (2001:38) research. Kuhlthau found that lawyers expressed disappointment and reservation about the application of current (computer) systems in meeting their information needs, particularly in more complex tasks. Kuhlthau (2001:31) adds perception as an additional affecting factor, particularly in relation to lawyers' experience of uncertainty and task complexity. Lawyers were found to express heightened interest and enthusiasm for more complex tasks rather than uncertainty as to their ability to carry out the task. In relation to their construction of knowledge and use of sources, where initially sources were used for background knowledge and then to aid in the construction of an argument, lawyers were found to stop when they perceived that they had sufficient information to create a persuasive argument.

The characteristics of information need can be influenced by a range of affecting factors as highlighted by section 3.10.1.1 above. Further affecting factors identified by Leckie, Pettigrew & Sylvain in relation to professionals are individual demographics (age, profession, specialisation, career stage, geographic location), context (situation specific need, internally or externally prompted), frequency (recurring need or new), predictability (anticipated need or unexpected), importance (degrees of urgency), and complexity (easily resolved or difficult). However, Wilkinson (2001:274) suggests that further research is needed to clarify the effect of these situational and contextual factors in information seeking and the stage at which such variables affect the information seeking process.

Leckie, Pettigrew and Sylvain suggest that the individual's perception of the information resource and the information content will impact on the path an individual might take in the information seeking process. Linked to this are familiarity and prior success, trustworthiness, timeliness, packaging, cost, quality and perceived accessibility. Both Kuhlthau (2001) and Leckie, Pettigrew and Sylvain (1996) identify sources of information as including internal and external

information resources in addition to colleagues and contacts as well as the individual's own knowledge. Wilkinson (2001:272) however found that lawyers overwhelmingly rely on informal sources to satisfy their information needs with these being identified as including colleagues in the firm, partners and colleagues outside the firm, judges, external committees, the client, the client's family and friends, the lawyer's own relatives and friends and other professionals and friends (Wilkinson 2001:265).

Awareness of information in the above model considers direct or indirect knowledge of information sources, including published sources and people. However Wilkinson (2001:271) also suggests that the lawyers in her study seemed to be aware of sources of information other than those they chose to use and awareness was not therefore determinative of the choices made as to whether to use them.

Outcomes in the above model are the results of the information seeking process with the optimum outcome being given as the information need being met and the professional accomplishing the task in hand. However, it is possible that an information need is not met and further information seeking is required and this is conceptualised in the model by the feedback loop. As a second round of information seeking is undertaken, the configuration of factors that come into play may alter. Whereas previously the individual may have sought information informally, because this was perceived to be timely, through feedback it was discovered that the information gathered, was not in fact very accurate. Therefore, in the next round of information seeking, it is likely that a completely different mix of source and awareness factors will be involved.

The feedback loop is also intended to illustrate that an information-seeking outcome is not a one-dimensional event, that it is possible that an outcome from one task associated with a particular role (such as advising clients in a counselling role) may quite unexpectedly benefit the professional in another role (such as planning for new services in the managerial role). Information-seeking activities and related outcomes, therefore, may have a much broader impact on professional practice than has been recognised (Leckie, Pettigrew and Sylvain,

1996). Wilkinson (2001:275), however, indicates the need for further research on the role of feedback in the information seeking process. Having identified the need for only one feedback path to the user's awareness of information she suggests that this feedback, through a re-shaping of the stages of the model, would go back to awareness of resources which in turn would affect the selection of resources, how information seeking proceeds, the characteristics of the sources (claiming that characteristics of resources only come into play once information seeking has happened), and ultimately the outcome of successive attempts at satisfying the information need. Further research into feedback could identify any influences on, awareness of information, but also how and when the information need arises, and even the tasks and roles involved.

It is clear that Leckie, Pettigrew and Sylvain's (1996) model outlined above is broader than information seeking as it also gives some consideration to use as indicated by 'outcomes are the results of the information seeking process with the optimum outcome being given as the information need being met and the professional accomplishing the task in hand'. It can also be argued that Kuhlthau's ISP model can be placed within this general model of information seeking behaviour, to further aid our understanding of the additional affecting variables, the affective feelings, cognitive thoughts and physical actions that can potentially influence individuals as they move through their search process and thereby help to provide as with a more holistic construction of an individual's information behaviour. For example we need to consider the feelings, cognitive thoughts and actions associated with uncertainty, within the heading 'tasks'; the feelings, cognitive thoughts and actions surrounding the individual in the selection, exploration, formulation and collection of knowledge within the 'characteristics of information need' and 'information seeking activity' headings but not forgetting their links to 'sources of information' and awareness of tasks', where there is the potential for individuals to experience mixed feelings as they progress through the task. These can include: optimism, uncertainty, confusion, increased confidence and reduced uncertainty. Kuhlthau's ISP model also adds the missing dimension of 'learning' to Leckie, Pettigrew and Sylvain's model. Although learning is suggested by 'failure' in Leckie, Pettigrew and Sylvain's model, where the suggestion is that in failing to meet an individual's information

needs, there might follow a re-configuration of factors, this learning is only suggested within 'outcomes'. Kuhlthau's entire model suggests the seeking of meaning, throughout the search process and as such is an important addition.

References

- Al-Hawamdeh, S. (2003) *Knowledge management: cultivating knowledge professionals*. Chandos.
- Alavi, M. and Leidner, D. E. (1999) 'Knowledge management systems: issues, challenges, benefits', *Communications of AIS*, 1 (7), pp. 2-41.
- Baker, A. C., Jensen, P. J. and Kolb, D.A. (2005) 'Conversation as experiential learning', *Management Learning*, 36 (4), pp. 411 – 427.
- Bandura, A. (2002) 'Social, cognitive theory in cultural context', *Applied Psychology: an International Review*, 51 (2), pp. 269 – 290.
- Bandura, A. (1986) *Social foundations of thought and action*, Prentice-Hall.
- Bechky, B.A. (2003) 'Sharing meaning across occupational communities: the transformation of understanding on the shop floor', *Organisation Science*, 14 (3), pp. 312-330.
- Beckett, A. J., Wainwright, C. E. R. and Bance, D. (2000). 'Knowledge management: strategy or software?', *Management Decision*, 38 (9), pp. 601-606.
- Beckman, T. J. (1999) 'The current state of knowledge management', in: Liebowitz, J. (1999) *Knowledge management handbook*. CRC Press.
- Beijerse, R. P. (1999) 'Questions in knowledge management: defining and conceptualising a phenomenon', *Journal of Knowledge Management*, 3 (2), pp. 94-109.

Boussouara, M. and Deakins, D. (2000) 'Trust and the acquisition of knowledge from non-executive directors by high technology entrepreneurs', *International Journal of Entrepreneurial Behaviour & Research*, 6 (4), pp. 204-226.

Brown, B. L. (1999) 'Self-efficacy beliefs and career development', *ERIC Digest* 205 [Available at: <http://www.ericdigests.org/1999-4/self.htm>] (Accessed 17th March 2007).

Case, D. O. (2002) *Looking for information: a survey of research on information seeking, needs and behaviour*, Academic Press.

Casey, A. (2005) 'Enhancing individual and organisational learning: a sociological model', *Management Learning*, 36 (2), pp. 131 – 147.

Chambers Concise Dictionary (1991) Chambers.

Chourides, P., Longbottom, D. and Murphy, W. (2003) 'Excellence in knowledge management: an empirical study to identify critical factors and performance measures', *Measuring Business Excellence*, 7 (2), pp. 29-45.

Darroch, J. (2003) 'Developing a measure of knowledge management behaviours and practices', *Journal of Knowledge Management*, 7 (5), pp. 41-54.

Doolittle, P. E. (1999) 'Integrating constructivism & cognitivism', [Available at: <http://edpsychserver.ed.vt.edu/research/icc.html>] (Accessed 17th March 2007).

du Troit, A. (2003) 'Knowledge: a sense making process shared through narrative', *Journal of Knowledge Management*, 7 (3), pp. 27-37.

Eager, C. & Oppenheim, C. (1996) 'An observational method for undertaking user need studies', *Journal of Librarianship and Information Science*, 28 (1), pp.15-23.

Elkjaer, B. (2001) 'The learning organisation: an undelivered promise', *Management Learning*, 32 (4), pp. 437 – 452.

Ellis, D. & Haugan, M. (1997) 'Modelling the information seeking patterns of engineers and research scientists in an industrial environment', *Journal of Documentation*, 53 (4), pp. 384-403.

Entwistle, N. (1981) *Styles of learning and teaching: an integrated outline of Educational Psychology for students, teachers and lecturers*. John Wiley and Sons.

Fenwick, T. (2006) 'Tidying the territory: questioning terms and purposes in work-learning research', *Journal of Workplace Learning*, 18, (5) pp. 265 – 278.

Ford, N. (2004) 'Modeling cognitive processes in information seeking: from Popper to Pask', *Journal of the American Society for Information Science and Technology*, 55 (9), pp. 769-782.

Ford, N. (2004) 'Towards a model of learning for educational informatics', *Journal of Documentation*, 60 (2), pp. 183-225.

Godbold, N. (2006) 'Beyond information seeking: towards a general model of information behaviour', *Information Research*, 11 (4) paper 269 [Available at: <http://InformationR.net/ir/11-4/paper269.html>] (Accessed 24th March 2007)

Gottschalk, P. (1999) 'Knowledge management in the professions: lessons learned from Norwegian Law firms', *Journal of Knowledge Management*, 3 (3), pp. 203-211.

Hildreth, P.J. and Kimble, C. (2002) 'The duality of knowledge', *Information Research*, 8 (1), paper 142. [Available at <http://InformationR.net/ir/8-1/paper142.html>] (Accessed 8th August 2005).

Honey, P. and Mumford, A. (1992) *The manual of learning styles*, Peter Honey.

Hutchinson, S. (2006) 'Learning by doing', *New Law Journal*, 1751, 2006.
[Available at: www.lexisnexis.com] (Accessed 17th March 2007).

Jarvelin, K. and Ingwersen, P. (2004) 'Information seeking research needs extension towards tasks and technology', *Information Research*, 10 (1) paper 212
[Available at: <http://InformationR.net/ir/10-1/paper212.html>] (Accessed 15th March 2007).

Jarvelin, K. and Wilson, T.D. (2003) 'On conceptual models for information seeking and retrieval research', *Information Research*, 9 (1), paper 163.
[Available at: <http://InformationR.net/ir/9-1/paper163.html>] (Accessed 8th August 2005).

Jashapara, A (2005) 'The emerging discourse of knowledge management: a new dawn for information science research', *Journal of Information Science*, 31 (2), pp. 136-148.

Kakabadse, N. K., Kakabadse, K. and Kouzmin, A. (2003) 'Reviewing the knowledge management literature: towards a taxonomy', *Journal of Knowledge Management*, 7 (4), pp. 75-91.

Kari, J. (2007) 'Conceptualising the personal outcomes of information', *Information Research*, 12 (2) paper 292 [Available at: <http://InformationR.net/ir/12-2/paper292.html>] (Accessed 17th March 2007).

Kerins, G., Madden, R. and Fulton, C. (2004) 'Information seeking and students studying for professional careers: the cases of engineering and law students in Ireland', *Information Research*, 10 (1), paper 208. [Available at: <http://InformationR.net/ir/10-1/paper208.html>] (Accessed 8th August 2005)

Kerka, S. (1998) 'New perspectives on mentoring', *ERIC Digest* [Available at: <http://www.ericdigests.org/1998-3/mentoring.html>] (Accessed 17th March 2007)

Kerka, S. (1997) 'Constructivism, workplace learning and vocational education'', *ERIC Digest* [Available at: www.ericdigests.org/1998-1/learning.htm] (Accessed 17th March 2007).

Kogut B. and Zander, U. (1997) 'Knowledge of the firm. Combinative capabilities, and the replication of technology', in: Prusak, L. *Knowledge in organisations*. Butterworth-Heinemann. pp.17-35.

Kolb, D. A. (1984) *Experiential Learning*, Prentice Hall.

Koskinen, K. U. 'Evaluation of tacit knowledge utilisation in work units', *Journal of Knowledge Management*, 7 (5), pp. 67-81.

Kuhlthau, C. C. (2004) *Seeking meaning: a process approach to library and information services*. 2nd ed. Libraries Unlimited.

Kuhlthau, C. C. (1993) *Seeking meaning: a process approach to library and information services*. Ablex Publishing Corporation.

Kuhlthau, C. C. (1991) 'Inside the search process: information seeking from the user's perspective', *Journal of the American Society for Information Science*, 42 (5), pp. 361-371.

Kuhlthau, C. C. and Tama, S. L. (2001) 'Information search process of lawyers: a call for 'just for me' information services', *Journal of Documentation*, 57 (1), pp. 25-43.

Lave, J. and Wenger, E. (1991) *Situated learning: legitimate peripheral participation*, Cambridge university Press.

Law Society (2005) *Training trainee solicitors; the Law Society requirements*. The Law Society.

Leckie, G. J., Pettigrew, K. E. and Sylvain, C. (1996) 'Modelling the information seeking of professionals: a general model derived from research on engineers, health care professionals and lawyers', *Library Quarterly*, 66 (2), pp.161-193.

Lewis, D. (2002) 'Five years on – the organisational culture saga revisited', *Leadership and Organisation Development Journal*, 23 (5), pp. 280-287.

Liebowitz, J. (1999) *Knowledge management handbook*. CRC Press.

Limberg, L. (1999) 'Experiencing information seeking and learning: a study of the interaction between two phenomena', *Information Research*, 5 (1), paper 68. [Available at: <http://InformationR.net/ir/5-1/paper68.html>] (Accessed 7th March 2007)

Lindsay, P. H. and Norman, D. A. (1975) Human information processing. In. Entwistle, N. and Hounsell, D. (eds) *How students learn*, University of Lancaster pp. 67 - 81.

Lloyd, A. and Somerville, M. (2006) 'Working information', *Journal of Workplace Learning*, 18 (3), pp. 186 – 198.

McDermott, R. and O'Dell, C. (2001) 'Overcoming cultural barriers to sharing knowledge', *Journal of Knowledge Management*, 5 (1), pp. 76-85.

McGregor, J. H. and Williamson, K. (2005) 'Appropriate use of information at the secondary school level: understanding and avoiding plagiarism', *Library and Information Science Research*, 27 (4), pp. 496-512.

Mainemelis, C., Boyatzis, E. and Kolb, D. A. (2002) 'Learning styles and adaptive flexibility: testing Experiential Learning Theory', *Management Learning*, 33 (1), pp. 5 – 33.

Marchand, D. A. (1998) 'Competing with intellectual capital', in: von Krogh, G, Roos, J and Kleine, D (eds) *Knowing in firms: understanding, managing and measuring knowledge*. Sage Publications, pp. 253 – 268.

Markless, S. 'Teaching your users: what you really need to know', *Legal Information Management* 4 (4), p. 221.

Merriam, S. B. and Caffarella, R. S. (1999) *Learning in adulthood: a comprehensive guide*. 2nd ed. Josey-Bass.

Niedzwiedzka, B. (2003) 'A proposed general model of information behaviour', *Information Research*, 9 (1), paper 164. [Available at: <http://InformationR.net/ir/9-1/paper164.html>] (Accessed 8th August 2005).

Nonaka, I and Takeuchi (1995) *The knowledge creating company: how Japanese companies create the dynamics of innovation*. Oxford University Press.

O'Donoghue, J. and Maguire, T. (2005) 'The individual learner, employability and the workplace', *Journal of European industrial Training*, 29 (6), pp. 436 – 446.

Oliver, R. and Oliver, H. (1997) 'Using context to promote learning from information-seeking tasks', *Journal of the American Society for Information Science*, 48 (6), pp. 519 – 526.

Orna, E. (1999). *Practical information policies*. 2nd ed. Gower.

Otike, J. (1999) 'The information needs and seeking habits of lawyers in England: a pilot study', *International Information and Librarianship Review*, 31, 19-39.

Parker, N. (2001) 'Student learning as information behaviour: exploring Assessment Task Processes', *Information Research*, 6 (2) [Available at: <http://InformationR.net/ir/6-2/ws5.html>] (Accessed 15th March 2007).

Pickard, A. J. (2002) *Access to electronic information resources: their role in the provision of learning opportunities for young people. A constructivist enquiry*. PhD University of Northumbria at Newcastle.

Poell, R. F. and van der Krogt, F. J. (1997) 'Organising work-related learning projects', *International Journal of Training and Development*, 1:3, pp. 181 – 190.

Politis, J. D. (2003) 'The connection between trust and knowledge management: what are its implications for team performance', *Journal of Knowledge Management*, 7 (5), pp.55-66.

Reio, T. G. and Wiswell, A. (2000) 'Field investigation of the relationship among adult curiosity, workplace learning, and job performance', *Human Resource Development Quarterly*, 11 (1), pp. 5 – 30.

Rowbotham, D. (2004) 'Developing competent learners: fine tuning the pursuit of effective learning', *Development and Learning in Organisations*, 18 (4), pp. 25-27.

Rusanow, G. (2003) *Knowledge Management and the smarter lawyer*. ALM Publishing.

Senge, P. (1990) *The fifth discipline: the art and practice of the learning organisation*. Currency.

Sparrow, J. (1998) *Knowledge in organisations: access to thinking at work*. Sage Publications.

Stein, D. (1998) 'Situated learning', *ERIC Digest*, 3 [Available at: <http://www.ericdigests.org/1998-3/adult-education.html>] (Accessed 14th March 2007).

- Sun, P.Y.T. and Scott, J. L. (2005) 'An investigation of barriers to knowledge transfer', *Journal of Knowledge Management*, 9 (2), pp. 75-90.
- Vakkari, P. (2003) 'Task-based information searching', *Annual Review of Information science and Technology*, 37, pp. 413-464.
- Vakkari, P. (2001) 'Task complexity, problem structure and information actions; integrating studies on information retrieval', *Information Processing & Management*, 35 (6), pp. 819-837.
- Wagner, B. A. (2003) 'Learning and knowledge transfer in partnering: an empirical case study', *Journal of Knowledge Management*, 7 (2), pp. 97-113.
- Wang, C. L. and Ahmed, P. K. (2003) 'Organisational learning: a critical review', *The Learning Organisation*, 10 (1), pp. 8-17.
- Wilkinson, M. A. (2001) 'Information sources used by lawyers in problem solving: an empirical exploration', *Library and Information Science Research*, 23, pp. 257-276.
- Wilson, A. M. (2001) 'Understanding organisational culture and the implications for corporate marketing', *European Journal of Marketing*, 35 (3/4), pp. 353-367.
- Wilson, T. D. (2002) 'The nonsense of 'knowledge management'', *Information Research*, 8 (1), paper no. 144, [Available at: <http://InformationR.net/ir/8-1/paper144.html>] (Accessed: 8th August 2005).
- Wilson, T. D. (1999) 'Models in information behaviour research', *Journal of Documentation*, 55 (3), pp. 249-270.
- Wilson, T. D. (1981) 'On user studies and information needs', *Journal of Documentation*, 37 (1), pp. 3-15.

Wilson, T. D. and Walsh, C. (1996) *Information behaviour: an interdisciplinary perspective. A review of the literature*. British Library Research and Innovation Centre. (British Library Research and Innovation Report no. 10).

Yoon, K. (1998) 'The use of certainty and role of topic and comment in interpersonal information seeking interaction', *Information Research* 4 (2), Available at: <http://InformationR.net/ir/4-2/isic/yoon.html> (Accessed: 15th August 2001)

Yoon, K. & Nilan, M. S. (1999) 'Toward a reconceptualization of information seeking research: focus on exchange of meaning', *Information Processing and Management*, 35, pp. 871-890.

4. Social World of the Trainee

4.1 Introduction

The aim of this research was to characterise the nature and role of the information behaviour of trainee solicitors in the context of knowledge development within a law firm environment.

A constructivist approach to inquiry was adopted utilising a narrative technique for the gathering of data. This research aimed to explore the information behaviour of trainee solicitors through their experiences within the context of their work environment. Through using a narrative technique the trainees were initially asked to talk about what they had been involved in to-date in their current seat of training, and as a result of this form of questioning the key theme that emerged as initiating their information behaviour was that of 'task'.

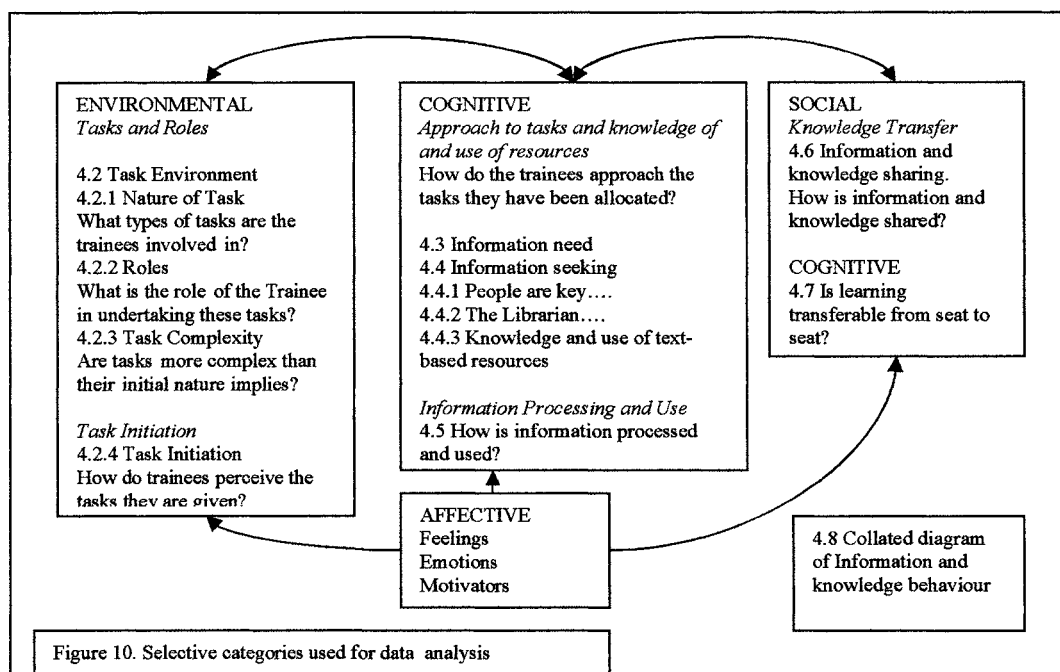
To aid in the presentation of the findings, the selective categories used to guide the analysis of the data have been mapped against the four inter-related variables identified within the literature as influencing information behaviour and, or, learning, that is, environmental, cognitive, social, and affective factors, (for example, (Casey, 2005:132; O'Donoghue & Maguire, 2005:440, McDermott and O'Dell, 2001; Wilson, 1999; Kuhlthau 1991).

Environmental factors place the trainee in context. The task environment provides a characterisation of the trainees' situation within the firm, providing a picture of the nature of the tasks undertaken; any resultant roles from tasks; the complexity of tasks; and the perceptions of the trainees as to why they were given these tasks; all of which can indicate an information and knowledge need.

Cognitive variables relate to their knowledge of, and approach to, tasks and resources.

Social variables are those which are mainly concerned with information and knowledge sharing through interaction and transferability.

Affective variables infiltrate the environmental, cognitive and social variables and relate to their emotions, feelings and motivators throughout their experiences within the firm.



Within each of the selective categories identified within Figure 10 above, the questions identified as relating to the selective categories have been asked and characterisations, in response to these questions, have been created and presented in italics. These characterisations serve to textually illustrate the factors that emerged as shaping the trainees' information behaviour and knowledge development in relation to the selective categories identified.

Characterisations are supported by diagrams which provide a picture of these shaping factors and their link to information behaviour and knowledge development. These diagrams have been brought together at the end of this section and serve to provide a detailed picture of the trainees' information behaviour.

Evidence in support of characterisations and diagrams is provided by combining excerpts from the trainees' narrations with researcher interpretations and the literature. Excerpts from the trainees' narrations are numbered, (CLP and a paragraph number or P and a paragraph number), and can be traced back to the penultimate analysis product in appendix 6. As Trainee 1 and Trainee 2 cross both seats of training, where required, one can differentiate between the seats by the use of (P) for Property and (CL) for Commercial Litigation.

4.2 Task Environment

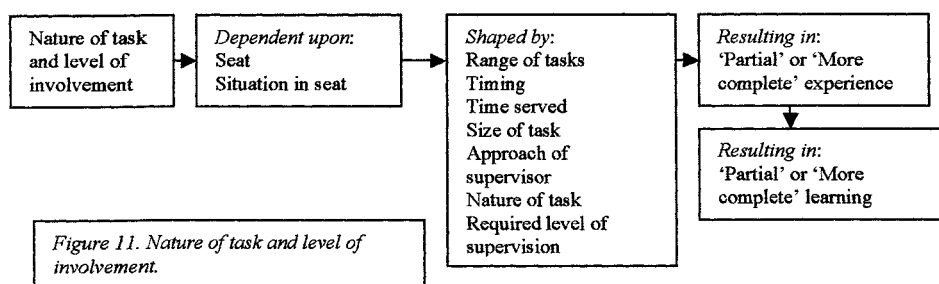
4.2.1 Task Environment: Nature of Task

What types of tasks are the trainees involved in?

Through an analysis of the trainees' narrations the types of tasks the trainees found themselves involved in were shaped by the key emerging themes; 'nature of the work in the seat', 'situation' and 'level of involvement' and can be characterised in the following way.

4.2.1a 'The nature of the task and the level of involvement in a task can be dependent upon which seat a trainee is in and their situation within that seat, and the resultant level of involvement in tasks can be considered 'partial' or 'more complete' and subsequently their knowledge development can be suggested as being 'partial' or 'more complete'.

4.2.1b 'Level of involvement and the potential to move towards a 'more complete' learning experience can be shaped by a range of factors including; range of tasks involved in over time; timing, (being in the right place at the right time); time served, (time spent in the seat suggesting an increase in experience); size of task, (whether a complete task in itself or part of a larger file matter); approach of supervisor, (in encouraging involvement); nature of task, (perceived as being more challenging); and the required level of supervision, (influencing what tasks can be given to the trainee)'.



For example, within the Commercial Litigation seat, where, as highlighted by Trainee 1, *'a lot of the litigation cases go on for longer than the six months'* (CLP3), tasks were initially expressed as being 'small', 'little things' involving, for example, drafting, legal research, speaking to clients and correspondence (CLP2). As the trainees are undertaking small tasks on a larger file matter and as these matters often last longer than the seat of training, then this would suggest that it can be difficult for the trainees to come to know and understand the full history behind a case due to their partial level of involvement and suggests that the trainees will not necessarily learn about the whole case but aspects of the case.

In contrast, the tasks discussed within the Property seat were perceived as being 'big' or 'major', involving for example the *'sale of a property'* (P3), or the *'compulsory order of some land'* (P1). Furthermore, Trainee 1 highlights having her own clients, *'but now I'm dealing with my own clients and a lot of residential sales and purchases'* (P6). In the interview situation it is possible that the trainees will have opted to discuss the 'bigger' tasks as these might stand out more in their minds because of their size and potentially be seen by them to be of more interest to themselves and to the interviewer. However, tasks involving the *'sale of a property'*, or *'dealing with my own clients'* do suggest themselves as being more complete and larger than, for example, drafting or correspondence and indicate the potential for learning about a matter more holistically. Furthermore, the sale of a property is suggested as being a typical task given over to trainees within the Property seat as Trainee 2 states, *'when I first started they train you up on, they give you the residential stuff just to get started and find your way round and get used to handling transactions on your own.'* (P9), and as

such it is not unusual for trainees to be involved in such sizeable or complete tasks.

However, independent of which seat a trainee is situated in, the trainees will not be involved in only one task during their period in each seat and are likely to build up their experiences and their learning as they progress through the seat. For example, within Commercial Litigation where initially tasks were identified as 'small', and therefore suggesting partial learning; 'timing', (being in the right place at the right time) (CLP4); 'size of task', (considered small enough to be given to the trainee) (CLP4); 'time served', (time spent in the seat) (CLP4); and the 'approach of the supervisor', (a willingness to let the trainee attempt a range of tasks) (CLP4), were identified as leading to an increased involvement in tasks, furthering the trainees' potential for acquiring a more complete learning experience. For example, 'timing' and 'size of task' led to an increased involvement for Trainee 1 and 'approach of supervisor' for Trainee 2,

Trainee 1 – 'I was quite lucky because quite a few new cases came through the door that were small enough for me to handle, so I got control of those cases, obviously with supervision' (CLP4).

Trainee 2 – 'he [supervisor] has got me quite involved in lots of files whereby correspondence will go in and go out and possibly and he will be monitoring what goes on in the files but I get to do quite a lot of it. Any big documents he lets me have a stab at it and he'll amend as necessary' (CLP4).

The situation of the trainee also emerged as being potentially linked to an increased involvement in tasks for trainees within Commercial Litigation. Where the trainees were found to be sitting in the same room as their supervisor all were found to indicate a more in-depth involvement in tasks as they progressed through the seat. In contrast, where the trainee does not sit with the supervisor, for example, as in the case of Trainee 3, *'I'm still physically in the employment department and I'm not actually working in anyone's team in litigation I just work for a lot of people, cause normally you are assigned to a bit of a team you know' (CLP5)*, no indication of an increase in level of involvement was identified through her narration.

Within the Property seat, where tasks were identified as big or major, 'time served' is also suggested as leading to an increased involvement in tasks, but in relation to the different types of tasks allocated to the trainee as a result of their acquired experience (P9). These tasks although not specifically referred to as being more difficult in nature, are suggested as such by trainee 2's narration, *'slowly I have been given more commercial style leases' (P9)*, indicating that perhaps commercial work is perceived as more challenging than residential work. As Trainee 2 gains more experience as she progresses through the seat, she is given different, and what potentially appear to be, more complex tasks to undertake. An increased involvement in tasks within Property is therefore suggested by the nature of the task and the experience of the trainee rather than purely an increased in-depth involvement with a range of tasks.

A further indication of why the tasks can differ between the two seats is the required level of supervision. There is an apparent emphasis on the close supervision of work within Commercial Litigation (CLP4) and this would appear to be indicative of the nature of the work within that seat as Trainee 2's reflection suggests that there is a need to ensure and confirm accuracy in litigation work, *'I can appreciate why in litigation you have to keep things much more monitored because one wrong word in a letter will really affect things but in property it is not quite as ... not cut-through but there is less emphasis put on that side of things' (CLP29)*. This need for the close monitoring or supervision of the work undertaken by the trainees in Commercial Litigation is likely to influence what the trainees are given to do and how the trainees go about performing tasks. This suggested 'less emphasis' in Property however does not necessarily mean that Property is less rigorous in their work but that the nature of the working of the legal areas is different. The trainees are also supervised within Property but in contrast to Commercial Litigation, they do not appear to be as closely supervised, with supervision appearing to be linked more to the seeking of guidance and help when uncertain as to what to do or how to do it. For example, Trainee 1 when in Property suggests approaching, when uncertain, those responsible for giving her the work, *'I've been given leases that have been very, very complicated and I've gone through it and again done my best and said I don't like this and I don't like that, this is why, and have gone through it with the person who has given it to*

me' (P8). Trainee 5 was also found to seek help as required when uncertain as to how to proceed, *'So I would say that I would check things with my supervisor and get back to you (P2).*

'The work of professionals is necessarily more task-oriented' (Leckie, Pettigrew & Sylvain, 1996:162) and it is the tasks undertaken as part of their traineeship that will enable the trainees to develop and, or, further develop their knowledge in the different practice areas of law. From the above evidence it can be posited that the nature of a task and the trainees' level of involvement in a task can suggest a 'more complete' or 'partial' learning experience, thereby their potential knowledge development can be considered to be 'more complete' or 'partial' as a result of the tasks they are involved in. Shaping factors found to contribute to an increased level of involvement, and therefore the opportunity for an increased learning experience, were found to vary and included; range of tasks; timing; time served; size of task; approach of supervisor; nature of task; and required level of supervision.

Although it is likely that by undertaking tasks this should contribute to the knowledge development of the trainee; learning as a result of the experiences that these tasks afford the trainee, what is not evident at this point is what the trainees' actual information behaviour is in relation to these tasks. There is only an awareness of the types of the tasks they have been given to undertake. However, these tasks are at least indicative of an initial need, for example, the need to find out and understand what is involved in the drafting of leases or the sale of a property and the need to know how to go about drafting leases, or to proceed with the sale of a property. This would suggest that the tasks indicate more than a need for information to meet the needs of the trainees in satisfying the tasks but the 'know-how' to perform the tasks. Hildreth and Kimble (2002:6) suggest that know-how is a mixture of explicit knowledge, understood as information in the context of this study, in the form of procedures that guide people in how to perform a task and tacit know-how. For example, in Trainee 2's narration *'when I first started they train you up on, they give you the residential stuff just to get started and find your way round and get used to handling transactions on your own.'* (P9), there is a need to familiarise oneself with

residential work suggesting a need for information surrounding particular matters in residential work and to be able to know what should be done with that information. However, '*getting used to handling transactions*' suggests more than a need for information on what to do and how to do it but the developing of experiential tacit know-how, to be better equipped to handle transactions on one's own. Trainee 1's narration '*so I got control of those cases*' (CLP4) suggests action, a need to do something with the cases and therefore also suggests more than a need for information surrounding the cases but the development of know-how, to enable action to happen. This know-how is likely to be in the form of information on case procedures and through working on these cases the development of experiential tacit know-how. This would suggest that information and knowledge are therefore linked when it comes to undertaking tasks; information provides the basis for the development of knowledge surrounding tasks, in providing the means for interpreting and understanding what to do, whereas tacit knowledge development is suggested as stemming from the doing, from working on the tasks, through the building up of an experiential knowledge of tasks.

To aid in the interpretation and understanding of the trainees' narratives, information is the general term used in relation to need and to knowledge that has been expressed in the form of documents, published resources, files, cases, etc. Information forms the basis for the development of know-how surrounding tasks, in providing the means for interpreting and understanding what to do. Knowledge or Know-how is used to suggest explicit knowledge (knowledge that can be expressed and therefore has the potential to become information) and tacit knowledge (inexpressible knowledge; that which is acquired over time through experience and practice).

By considering the role of the trainee in undertaking tasks in more depth, this suggested mutual need for information and know-how when undertaking tasks is explored further.

4.2.2 Task Environment: Roles

What is the role of the Trainee in undertaking these tasks?

‘Research into the information needs of professionals has identified that professionals often have several roles to play and that each role might suggest differing information needs’ (Leckie, Pettigrew & Sylvain, 1996:163).

The primary role of the trainees is that of learner, as students of law. This role however, suggests a need not only for information as suggested by Leckie, Pettigrew and Sylvain (1996) but know-how in order to be able to fulfil their role and to learn. For example, in their role as learners they are likely to be given tasks felt appropriate for a trainee to undertake such as the drafting of documents (Law Society, 2005:12; Goriely & Williams, 1996). In undertaking this task the trainees will need to identify what information is to be included in the document but in addition they will also need to understand the task of drafting documents and to learn how to draft the document, and as such this task indicates a mutual need for information and know-how when working towards task completion. Leckie, Pettigrew and Sylvain (1996:173) further suggest that ‘lawyers also have several roles to play, identifying those of drafting, advocacy, negotiating, counselling and management’, and that ‘each of these roles will result in different activities and that these activities will in turn shape the type of information need’. This research has found however that not only do roles indicate activities, that is, related tasks, as suggested by Leckie, Pettigrew and Sylvain (1996), but that a task was found to consist of a series of subtasks as identified by Hackman (Jarvelin & Wilson, 2003:9). In addition, as a result of these subtasks, there is a potential need for further, differing roles to be enacted or realised in achieving task completion. These additional roles where they result in differing activities also suggest a further need for information and know-how in order to meet the needs of these activities, thereby providing the opportunity for a broader and differing learning experience. This provides evidence in support of the need to consider information behaviour in relation to individual tasks rather than purely in relation to jobs or roles. As Jarvelin and Ingwersen (2004:11) suggest ‘it is not sufficient to perform just job-level analyses; one

needs to look into individual tasks, because the latter vary heavily in their requirements for information and typical sources of information even within one job’.

Through an analysis of the trainees’ narrations surrounding the tasks undertaken within the seats of Commercial Litigation and Property the key emerging shaping themes identified are; ‘task related roles’, ‘size of task’ and the ‘parallel nature of information and knowledge need’ and can be characterised in the following way;

4.2.2a ‘Evidence suggests that tasks can indicate the need for more than one role to be enacted. The number of roles enacted as part of a task are influenced by the ‘completeness’ of the task, whether the task can be viewed as ‘more complete’ in itself, for example, the sale of a property, or ‘partial’, in that the task forms part of a larger file matter. Depending on the task and the resultant number of roles, the amount and range of information needs on ‘what to do’ and know-how in relation to ‘how to do it’, to meet the various activities involved will vary and will therefore result in differing learning experiences’.

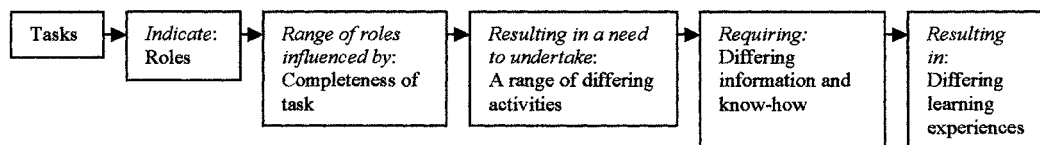


Figure 12. Tasks can lead to additional roles and differing learning experiences

For example, within Commercial Litigation, despite the tasks being small the trainees were found to undertake a range of roles when carrying out these tasks. The tasks the trainees were involved in included;

Trainee 1 - client contact, drafting, timetables, hearings,

Trainee 2 – correspondence, drafting, speaking to the clients, speaking to the barristers, procedural aspects

Trainee 3 – procedural aspects, legal research, brief to Council, instruct agents, interview witnesses, take witness statements, file things at court, faxes, letters, telephone calls

*Trainee 4 – research basic points
(CLP2)*

In considering the tasks the trainees were allocated, a number of roles can be identified, for example, Trainee 1 was given the task of drafting documents and her role became that of drafter. Trainee 4 was given the task to research into some basic points of law and takes on the role of researcher. Trainee 3 was given the task of briefing council and took on the role of advisor and Trainee 2 was given the task of speaking to clients and, depending on the context, will have taken on any one of a number of roles; researcher, informer and, or, advisor. As the trainees within Commercial Litigation were allocated tasks that formed part of a larger file matter then it can be suggested that, at least at the beginning of their seat, the task tended to result in the undertaking of a single additional role, to that of learner, to satisfy the task given.

In contrast, the trainees whilst in Property were found to undertake a number of roles stemming from a single task. For example, one of the tasks Trainee 2 (P9) has been involved in suggests her potentially undertaking a range of roles in addition to that of learner and includes; advisor [to client, landlord], negotiator [where the parties involved come back], and drafter [of licenses], *Trainee 2 – ‘Slowly I have been given more commercial style leases and transactions like that to do with ... licences to assign where we act for the landlord and he leases out one of his properties, maybe a shop or something, and the tenant wants to assign it to somebody else then you have to get the landlord’s approval to do so. I’ll help those transactions along because they are quite simple, it is standard document that you have to amend and put in the correct parties plus we negotiate it if people come back to you’ (P9).*

Trainee 1’s involvement in residential conveyancing suggests her undertaking roles as ‘learner’ [of procedures, how to approach purchases and sales], advisor [to clients] and drafter [of sales and purchase documents], *‘but now I’m dealing*

with my own clients and a lot of residential sales and purchases – related sales and purchases so you are sitting in the middle of a chain or whatever which gets quite complicated (laughs) and people are ringing you from both ends. Saying we want to do this then, you know? '(P6)

Each role undertaken by a trainee will require potentially differing information and know-how. For example, when undertaking the role of drafter, the trainee will need to identify the appropriate information to be placed in the document perhaps using internally published information in the form of existing leases or firm precedents as examples, or by asking for guidance. In addition there is a need to also develop an understanding of the information found, to be able to interpret that information and to then relate it to the task in hand, suggesting the need for know-how, potentially both explicit and tacit. In the role of researcher, the trainee needs to be able to identify or to know which resources to use to best meet the needs of the task and to develop the know-how, potentially both explicit and tacit, to access and manipulate these resources. For Trainee 1 in her role as advisor, in order to advise a client she will need to seek out and gather information for the client, (perhaps via the client's file or via another solicitor), and from the client in order to establish the current situation and to enable advice to be given. Furthermore, acting in an advisory role suggests more than simply identifying, interpreting and providing information but developing the ability to communicate that information in relation to the client's specific situation in order to be able to advise the client, suggesting a need for explicit and tacit know-how to enable effective communication to happen and advice to be given. In addition the trainee will need to develop communication skills and know-how to ensure that the client is enabled to understand the advice being given. For example, in order to gauge the client's understanding of the situation the trainee might take into consideration the client's verbal and physical reactions thereby suggesting that the trainee will need to be able to interpret what is understood by the client through the verbal information offered by the client, and be able to interpret the client's body language, perhaps using insight, suggesting the need for both information and tacit knowledge. It is possible that this insight is something that only develops over time and through experience and as such is potentially tacit.

Through an examination of the roles undertaken by the trainees in Commercial Litigation and Property it would appear that it is not only the tasks that can result in the trainees being enabled to have a broader learning experience but the resultant roles. In addition it is likely that differing information and knowledge needs can potentially occur depending on what the task and roles are. What is not explicit at this point is what the trainees bring to bear in terms of their own knowledge or how they go about acquiring the required information and knowledge. This is explored further in sections 4.3 and 4.4 below.

This section highlights the potential for multiple roles to be performed by the trainees when undertaking a single task and as a result of these roles, the potential need to acquire differing knowledge. This would suggest that the performing of a single task is potentially more complex than its initial nature implies. However, is it the additional roles that lead to a task being perceived as more complex or do other factors come into play? This notion of ‘complexity’ is explored further.

4.2.3 Task Environment: Task Complexity

Are tasks more complex than their initial nature implies?

‘Task complexity is emerging as an important, influential factor in information-seeking behaviour in work situations’ (Kuhlthau & Tama, 2001:27).

When considering the tasks allocated to the trainees, the additional shaping factors such as the range and type of roles that result from undertaking the task and the potential range of information and knowledge needs, is it not likely that the task can become more complex?

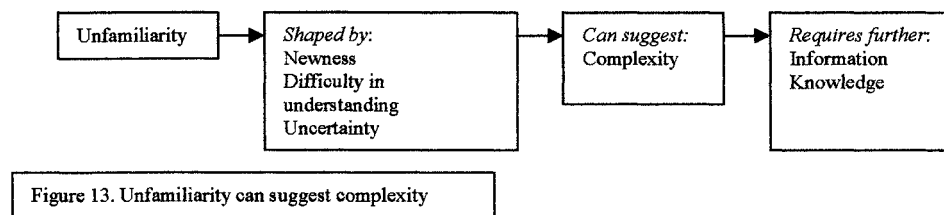
From the analysis in section 1.2 the roles enacted by the trainees can be said to reflect the multiple realities of the initial task as the task is itself composed of many parts and is not always as straightforward as its initial nature might suggest, and therefore the task can be said to have the potential to become more complex. However, the nature of the tasks and their resultant roles did not

emerge as fully explaining why some tasks might be perceived as potentially more complex. Additional key shaping factors are suggested by the narratives as being; unfamiliarity; familiarity; discussion; and skills development.

4.2.3.1 Unfamiliarity can lead to uncertainty and a perception that a task is more complex

Through an analysis of the Trainees' narrations unfamiliarity can be characterised in the following terms.

4.2.3.1a 'Unfamiliarity as a result of, being 'new' to the seat and therefore unfamiliar with the workings of that seat or its file matters; finding it difficult to understand; and experiencing feelings of uncertainty as to the ability to do the task, can lead to the task being perceived as more complex by the trainee, suggesting a need for further information and knowledge surrounding the task'.



For example, Trainee 2 experiences some difficulty in undertaking what is considered by her to be a typical trainee task, difficulty in following and learning privilege and disclosure procedures within Commercial Litigation suggesting elements of complexity, *'one of the main things you have to do in litigation is document disclosure' [and] 'but the rules are quite difficult to understand and it is not always actually straightforward and I find that although its really common tasks that trainees get to do, but it's actually quite difficult to do unless you know the file because it is difficult to know is this relevant? Is this going to be privileged or I mean you know the basic idea of privilege but even still you are not quite sure' (CLP11)*. In addition, as the trainees within Commercial Litigation undertake small tasks on a larger file matter and as these matters often last longer than the trainees' seat of training, then it can be difficult

for them to come to know the full history behind the case. This can be seen to result in the trainee perceiving the task to be more difficult, having a direct influence on her need to know and therefore her ability to carry out the task. The task can therefore be said to be more complex from the perspective of the trainee. Trainee 2's narration also suggests feelings of uncertainty, despite having knowledge of what is meant by disclosure and privilege she remains unsure further suggesting perceiving elements of complexity in the task resulting in the need to find out more and to learn more.

Unfamiliarity and complexity in the above example can be seen to equate to Dervin's (Yoon, 1998) cognitive gap. Trainee 2 is certain about what she knows, that is, the basics of privilege but uncertain about what is privileged in relation to a particular file indicating a need for further information on the file and on the subject of privilege and disclosure. Trainee 2 also indicates the difficulty in understanding the subject of privilege and disclosure which suggests that the seeking of further information to meet this need would be insufficient and that there is a need to learn more in relation to applying knowledge of the subject. In considering her statement, '*although its really common tasks that trainees get to do*', the suggestion is that she has come across privilege and disclosure before, and despite this prior experience, is continuing to have some difficulty in understanding the nuances of that practice area. This perhaps indicates that the learning required here is that which is acquired more through the building up of experience; the building up of explicit and tacit knowledge through an increased experience of 'doing' tasks involving disclosure and privilege and assimilating her knowledge as a result of these concrete experiences.

Kuhlthau's (Kuhlthau & Tama, 2001:27) model presents information seeking as a process of construction with uncertainty decreasing as understanding increases. In relation to Trainee 2's narration, her uncertainty will decrease as she becomes more familiar with the legal practice area but this familiarity and therefore reduced uncertainty will rely on an increased range of experiences in that practice area and not purely on the seeking of further information. This partially supports prior empirical research by Bystrom (Jarvelin & Wilson, 2003:15) who identified that the higher the degree of task complexity the more there is a need

for domain and problem-solving information. However, Trainee 2 requires more than domain [legal practice area] information and problem solving information but further experiential know-how, to be better able to transfer domain information across differing file matters.

4.2.3.2 Familiarity can alleviate complexity

Through an analysis of the Trainees' narrations 'familiarity' can be characterised in the following ways;

4.2.3.2a 'Familiarity with practice areas through prior work experience can boost confidence in a perceived ability to carry out tasks, familiar and unfamiliar, and can alleviate complexity. However, familiarity as a result of educational study potentially only alleviates complexity, where what has been studied is recognised as feeding directly into practice. In addition, familiarity as a result of educational study and familiarity gained as a result of experience in practice potentially blends together to form a single experiential reality and familiarity as a result of this blended reality can alleviate complexity. All forms of familiarity will potentially shape the information behaviour of the trainees and their knowledge development'.

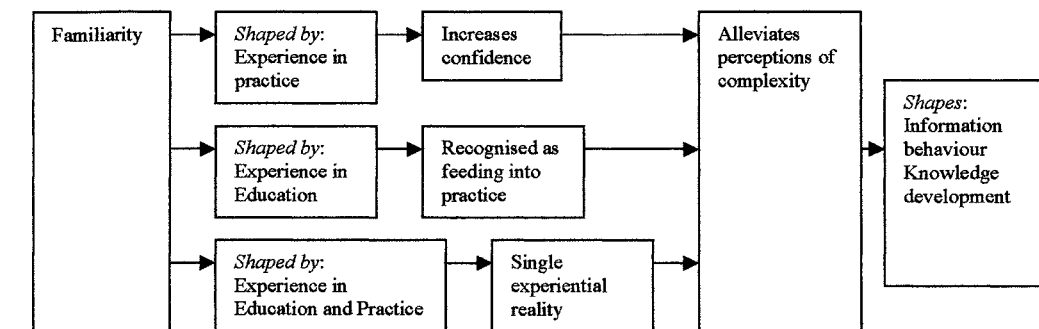


Figure 14. Familiarity can alleviate complexity

For example, Trainee 2 notes that when first in Property she was given residential work '*when I first started they train you up on ... they give you the residential stuff just to get started and find your way round and get used to*

handling transactions on your own' (P9). However, as she is now in Property for a second time, she is now given more responsibility, 'so because I had done a seat in property before, rather than treat me as a trainee and just get me to do the registrations and the research, they actually gave me quite a lot of responsibility which is good because you learn a lot quicker' (P12). Trainee 2, having worked in property before, brings actual work experience to the seat, and as a result is more confident about, and familiar with, some of the work. This, however, does not necessarily suggest that her tasks are indeed perceived as straightforward or not complex as Trainee 2 emphasises her continuous learning, 'and I feel as though I am learning a lot quicker as well because you are expected to land on your feet and get on with it. And because you are learning it you remember everything that you have done so you really do feel as if you are learning everything all the time, very quickly, because you have to, and that is rewarding. And then when you get it the next time you can do it because you have done that before and you can just go right through it' (P13).

'When you get it the next time you can do it because you have done that before and you can just go right through it' does suggest an element of uncertainty when first faced with the task, and the resultant need to *'learn'* how to carry out the task could indicate that the task might initially be perceived as being more complex than straightforward by the trainee. However, there is no real evidence of this trainee experiencing any real difficulty, indeed, it is evident that being *'expected to land on your feet and get on with it'* does not phase the trainee, in fact she would appear to revel in the opportunity to learn in this way, finding it *'rewarding'*. This *'attitude'* is perhaps indicative of the increased confidence of the trainee as a result of her prior experience in that seat and despite the need to continuously learn appears to alleviate any real perceptions of complexity. This is further evidenced by considering Trainee 2's narration in Commercial Litigation with that of her narration in Property. Whereas Trainee 2, having prior experience of Property, was found to be more than confident in undertaking new tasks within Property, clearly thriving on the unknown and finding the learning experience rewarding, she is less so in Commercial Litigation, where she has no prior experience, except that from University, of the practice area, finding *'the rules difficult to understand' (CLP11)*, and *'not always straightforward'*

(CLP11), suggesting experiencing some difficulty in undertaking the task, and potentially perceiving the task to be more complex. Within Property Trainee 2 is more confident in her approach to tasks as a result of her prior experience and this confidence in addition to alleviating perceptions of task complexity appears to shape her perceived ability to approach tasks, feeling more confident in approaching tasks, both familiar and unfamiliar. This would suggest that confidence helps shape her information behaviour and knowledge development, confident in being able to establish what she knows and does not know and therefore needs to find out and learn in order to tackle the task. Trainee 2's confidence is suggestive of the formulation stage in Kuhlthau's (Kuhlthau & Tama, 2001:27) model where when a focused perspective of the problem is formed uncertainty diminishes as confidence begins to increase. The focused perspective in relation to trainee 2 is that she is more confident in her ability to tackle the tasks given to her, however she is potentially only at the initiation stage in Kuhlthau's model, at the stage of recognising what she does not know and therefore needs to find out. This would suggest that confidence as a result of prior experience can alleviate feelings of uncertainty at the initiation stage of a task and potentially right through to the formulation stage.

In addition Trainee 2's initial approach to the task and her resultant learning can be interpreted as further shaping her behaviour; having tackled a task, learning by doing, she is able when faced with that task again, to immediately know what to do and how to do it, *'you can just go right through it'*. This is an important point when considering information behaviour as there is no indication of any further need for information or knowledge and could suggest that as one becomes more 'expert' through experience there is not the same need to seek additional information or knowledge. Rather, it is illustrative of Trainee 2 having successfully brought to bear her prior learning from a previous situation to a new situation, and provides some evidence in support of Stein (1998:1) who suggests that knowledge is acquired situationally and transfers to similar situations. Furthermore, Trainee 2's suggestion that she is *'expected to land on your feet and get on with it'* is indicative of her adopting a concrete activist style of learning, where she is happy to 'jump right in and actively start doing things' (Baker, Jensen & Kolb, 2005:412). However, despite her willingness to adopt

this style of learning, it is clear that as it is expected and therefore illustrates how one's environment can influence how one learns or is expected to learn.

However, the 'attitude' of Trainee 2 towards the extra responsibility and increased learning is potentially also as a result of the culture of the Property seat where there is an expectation *'to land on your feet and get on with it'*. Culture is thought to guide and shape the values, behaviours and attitudes of employees and can be found embedded in the way people act, what they expect of each other (McDermott and O'Dell, 2001:77).

Although Trainee 2 does have previous experience of the Property seat and thereby previous knowledge of how things are done in that seat, it is not necessarily true to say that the other trainees bring no experience to the seat as all trainees will have studied aspects of Property law and Litigation at University and, or, on the Legal Practice Course (Law Society, 2005). However, when asked to reflect on that experience, where in some instances the trainees were found to clearly attribute their knowledge of how to do things to their education at University or the Legal Practice Course, others were more uncertain. For example, Trainee 1 attributes her knowledge of Landlord and Tenant practice to her time on the legal Practice Course, *'I happened to study landlord and Tenant as an option, ehm, so I do know, again it was a short, it was on LPC, it was a short period of teaching Again it was the basics, you don't go into convoluted leases about various things cause they can go on for 100s of pages. But in short the basics are; your repair covenant, things like that, so I was taught those which was quite fortunate'* (P15). Trainee 1 expresses a degree of confidence in her ability to tackle the task but unlike Trainee 2, where it was as a result of her experience in practice, suggests that it is because of her learning on the Legal Practice course. Trainee 1 perceives the task as being less complex as a result of her learning in education, feeling fortunate to have been taught the basics. Knowing the basics will in turn help shape how she approaches the task, her information behaviour and knowledge development; bringing to bear what she knows to establish what she does not know and therefore needs to find out or learn in order to complete the task.

For other trainees however, there was a certain amount of uncertainty. This uncertainty relates to; how much knowledge the trainees perceive themselves as bringing from University or the Legal Practice course to the firm (P14); to what extent they perceive that what they have learned whilst at University or on the Legal Practice Course as being transferable to the firm (P14); and to what extent they can recognise how they came to know something (P17). This would suggest that whereas in some circumstances it might be clear to the trainees how they came to know what to do, linking that knowledge to their educational studies in law, thereby shaping their information behaviour in approaching tasks, how they come to know what to do would appear to become more blurred as they spend more time in practice. Familiarity with, and experience of, Property Law and Litigation gained prior to the seat, through, for example, their time in education, potentially becomes embedded within their experiences gained through working within the firm to form a single experiential reality. This would suggest that both experiences, their time in education and time in the firm, blend together to shape the trainees' information behaviour when approaching tasks. However, as experience gained prior to the seat is not necessarily perceived as being directly transferable to practice this does indicate a need for further learning in these areas in situ. As was posited in the case of Trainee 2 above, it is possible that it is this further learning in situ, through experience in practice, that leads to the building up of the confidence of the trainee and potentially how the unknown, for example new tasks are perceived, thereby potentially alleviating perceptions of complexity and shaping their information behaviour and knowledge development.

4.2.3.3 The need for discussion can suggest complexity

Through an analysis of the trainees' narrations 'discussion' in relation to task complexity can be characterised in the following way;

4.2.3.3a 'The use of discussion to aid in the clarification of tasks and the appropriate steps to take suggests that there is the possibility of taking different tactical approaches in working towards a possible solution and as such does not suggest that tasks are necessarily straightforward and can therefore be

considered to be potentially complex. Furthermore, use of discussion to aid in the clarification of tasks and the appropriate steps will shape information behaviour and knowledge development’.

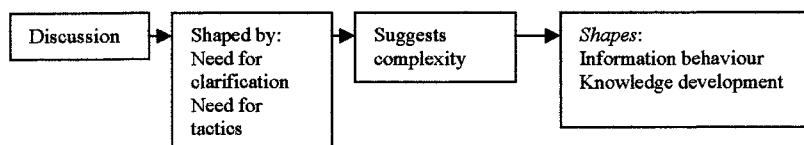


Figure 15. A need for discussion can suggest complexity

For example, Trainee 1 and Trainee 2 both emphasise the discursive nature of work within Commercial Litigation;

Trainee 1 – ‘And [the partner] is the type of person that if she is finding it difficult to get her head around something she will ask if she can discuss it with me just to get my thought process worked out, which is really beneficial to me because I can then understand where she is going, where the thought process should be going if you are trying to work out whatever’ (CLP15).

Trainee 2 – ‘what’s quite good about the partner that I share with is that he tends to talk about even cases that I am not involved in. He will talk about them with me and we’ll discuss the tactics involved and what the next step will be. Cause it helps him, he can talk about it and it helps him sort of formalise it in his mind and it helps me cause I can realise that’s what he would do in that situation, so you learn from that as well so it’s quite good’ (CLP140).

Both trainees suggest that discussion is used by the solicitors to help them in the formalisation of tasks, in identifying the appropriate steps to take when performing the task thereby indicating the possibility of taking different tactical approaches, an element of complexity indicated by Jarvelin and Wilson (2003:9), in working towards a possible solution. This does not suggest that tasks are necessarily straightforward, and can therefore be considered to be potentially complex. Discussion surrounding possible tactics and steps to be taken will also inform the trainees as to how they might potentially approach similar tasks, thereby shaping their information behaviour when faced with a similar task. The

narrations would also suggest that discussion contributes to the knowledge development of the trainees. 'Through conversation the individuals in their conversations create together new ways of understanding as they relate to one another' (Baker, Jensen & Kolb, 2005:422). The partners are resources of information and knowledge and through the discussion of matters enable the trainees to learn about the facts of the matter in context (information) and the processes and tactics involved (know-how, potentially tacit and explicit). However, it is not just that the trainee is enabled to learn, but that both the partner and the trainee, through conversation, are creating an understanding of the matter.

4.2.3.4 *The need for further skills development can suggest complexity*

4.2.3.4a *'A need for information on procedures and a recognition of a further need to develop skills or know-how in the use of tactics, negotiation, professional ethics, and communication, can be indicative of task complexity shaping information and knowledge development needs'.*

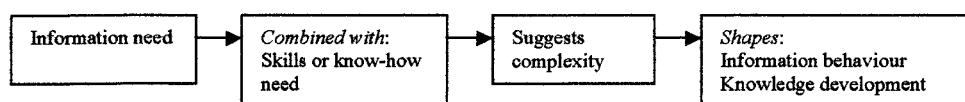


Figure 16. Further skills development can suggest complexity

Within Commercial Litigation the nature of the work suggests the need to know procedures, *Trainee 2 – 'Basically in litigation it is all governed by the civil procedure rules which they were recently reformed, 98 I think by Woolf, who reformed them all so and they are all contained within the White Book' (CLP8).* Familiarity with these procedures was also identified in relation to having the ability to develop further skills, *Trainee 2 – 'Cause you really have to understand the steps involved before you can start thinking about the tactics and negotiations that sort of thing but you also get introduced to that on the LPC, ehm, so it is just a question of, you know the basics when you start as a trainee, but then a) you are putting it into practice which is completely different and b) actually having to go back to the white book and refer to it in much more detail'*

(CLP9). Although the procedures are set out in the White Book, it is clear that this in itself is insufficient and that there is a need to supplement knowledge of procedures by developing skills in tactical thinking and negotiation. In addition, despite bringing prior experience of the procedures from the Legal Practice Course (LPC), Trainee 2 suggests that putting this knowledge into practice within the context of the firm is different and that there is also a need to refer to the key resource in more detail, to develop one's knowledge further through the further seeking of information. All of this suggests that Trainee 2 is bringing to bear her existing knowledge and experience of the procedures to establish what she knows (certainty), in order to establish what she does not know, (uncertainty). However, uncertainty here is more than identifying what one does not know and therefore a need to find out, for example, through reference to the White Book, but an indication of a need to also develop knowledge and skills in tactics and negotiation.

This need to develop knowledge and skills is further highlighted by Trainee 1, who, when considering establishing a client's case, a stage in the procedures within Commercial Litigation, identifies the need for the development of professional skills, *'you've got to get away from your personal reaction to something and get it back to a professional reaction to something. That does take practice because your initial... if somebody is upset you want to sympathise with them. You are to an extent but there is a real risk of then saying "oh I'll sort it out, it's alright" and you can't! You'll walk out of the room and think "oh what have I just said?" So it's just that you have got to get away from your personal reaction to being "I'm in work, I'm a business person" which is difficult to start with, you've got to put a different head on. Again that takes practice and you can't learn that from somebody else (CLP16)*. This suggests that Trainee 1, in addition to bringing to bear her existing knowledge and experience of the procedures to the task, needs to not only know how to deal with clients but to be aware of her own personal traits in reacting to client situations and recognises the need to develop knowledge of and skills in professional standards of conduct.

All of this suggests that it is not simply a case of identifying and acquiring the appropriate knowledge, i.e., the know-how to be able to carry out the task, but of identifying the need to develop associated knowledge and skills, an element of complexity identified by Jarvelin and Wilson (2003:9). This need for the trainee to further develop knowledge of procedures through further information seeking and to develop knowledge and skills in tactics, negotiation and professional behaviour is therefore suggestive of task complexity.

In this section, the need to act additional roles, other than that of learner, led to an exploration as to whether these roles, in the performing of a task, resulted in that task being perceived as more complex than its initial nature suggested. It was found that this notion of complexity was not limited to the roles played but was also shaped by a range of additional factors; familiarity; unfamiliarity; discussion; and skills development. The roles played combined with the identified shaping factors were found to be indicative of the trainees' existing knowledge (certainty) and their potential information needs (uncertainty), and provides further evidence of the relationship between information behaviour and knowledge development. But how did the trainees perceive these tasks on initiation? Why did they think that they were given these tasks to perform?

4.2.4 Task Environment: Task Initiation

How do trainees perceive the tasks they are given?

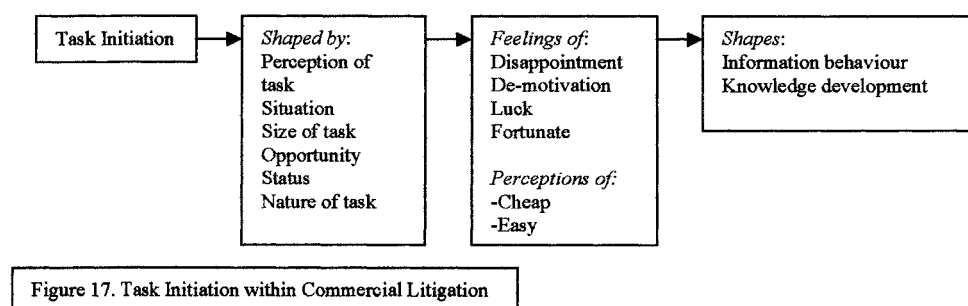
Uncertainty refers to what the user is aware of not knowing and thus needs to find out; this is often called an information need or a cognitive gap (Yoon, 1998). The information needs of the trainees are likely to start with the initiation of a task, however, research has shown that it is not simply a case of establishing what one needs to know, but that affective factors such as context (in relation to both role and task situations) can potentially influence need (Ford, 2004, Ellis, 1997, Wilson, 1981). An exploration of the initiation of tasks was found to result in the emergence of a range of affective factors, including context, providing an insight into the perceptions of the trainees, their feelings in being faced with a task and why they felt they were being given these tasks to undertake.

No two shaping factors were found to be exactly the same with Commercial Litigation and Property revealing differing perceptions and interpretations, perhaps due to the nature of work and the size of tasks encountered by the trainees, and has therefore been separated below. The range of emerging shaping factors is also an indicator of the range of tasks and potential experiences that the trainees will gain as part of their training period within the firm and are further indicators of the potential differing learning experiences and these learning experiences, in the form of the tasks that they are given to undertake, will shape their information behaviour and knowledge development.

4.2.4.1 Task Initiation: Commercial Litigation

Within Commercial Litigation a range of perceived factors were identified by the trainees and included; a perception that the supervisor already knew the answer; situation; size of task; opportunity; status; the nature of the tasks, being procedural or complex research points, difficult, or costly.

Through an analysis of the Trainees' narrations within Commercial Litigation the realities surrounding 'perception of task initiation' can be characterised in the following ways;



4.2.4.1a Task Initiation: The supervisor already knows the answer

4.2.4.1a(i) 'Despite appearing to understand and accept why initially being given basic points to research, there is the potential to perceive the task as a confirmation exercise; to confirm what is already known, and therefore of little value, potentially leading to feelings of disappointment and a lack of motivation'.

Trainee 4 feels that the solicitors already know the answer to the questions he is initially asked to research into, *'one of the first jobs to get you into the swing of things is to research the basic points, which I think as well they know the answer to already. They are just giving it to you to do. I think this is quite common and they already know the answer but they just want you to confirm it for them, my supervisors'* (CLP28). Trainee 4, despite appearing to understand and accept why he is initially given basic points to research, perceives that he is just being asked to confirm points that his supervisors already know the answer to, and appears to be expressing some disappointment at this. This is an interesting point as it can suggest that perhaps the trainee does not as yet perceive the work allocated as being of great value, perhaps as a result of his newness to the seat and therefore unfamiliarity with the workings of commercial litigation. As noted above (4.2.1), Trainee 2's reflection on work within litigation suggests that there is a need to ensure and confirm accuracy in litigation work, suggesting context as a shaping factor in litigation in relation to the initiation of tasks. Trainee 4's perception of the task and possible disappointment at the confirmation nature of the task could potentially result in a lack of motivation which in turn could influence his learning as a result of the task. Prior research identified motivation (Pickard, 2002:65) as an influential factor in relation to a willingness to learn. If Trainee 4 does not perceive the task as being of any great value to the solicitor will he perceive the task as containing any valuable lessons for him to learn?

4.2.4.1b Task Initiation: Situation, Size of Task and Opportunity

4.2.4.1b(i) 'Task initiation can be dependent upon situation, being in the right place at the right time; size of task; and opportunity, resulting in feeling lucky'.

For example, Trainee 1 indicates size of the task as being influential, suggesting that she was given increased responsibility because the tasks were perceived to be small enough for her to handle, *'I was quite lucky, quite a few new cases came through the door that were small enough for me to handle, so I got control of those cases, obviously with supervision'* (CLP30). Trainee 1 also expresses 'luck' at arriving at the right time, suggesting that this is seen as a bonus when compared to the smaller tasks that the trainees in litigation are usually given to handle (CLP1). There is also the further suggestion of the opportunity for Trainee 1 to acquire a broader or more complete experience, seeing them as cases and not simply small tasks that form part of a larger matter and as such these will shape her information needs and knowledge development; identifying information needs in relation to the case as a whole and through interpreting and understanding this information learning how to go about dealing with the case. Despite this increased responsibility, however, it is unlikely that Trainee 1 will see these tasks through to the end due to the nature of work within Commercial Litigation which will further shape her knowledge development, potentially reducing her learning experience through having to leave the case before it is complete (CLP6).

4.2.4.1c Task Initiation: Situation, Status and Opportunity

4.2.4.1c(i) 'Task initiation can be dependent upon being fortunate in who you work for, shaped by situation, status, and opportunity'.

For example, for Trainee 2 it is because she is sitting with her supervisor, who is a partner and in addition she also carries out work on behalf of another partner, *'I sit in with my direct supervisor who is a partner. And he has got me quite involved in lots of files'* [and] *'I also work for the head of department who is also a partner and he has let me get involved'* [and] *'he tends to have bigger cases'* (CLP31). Trainee 2 perceives herself to be fortunate to be working with and for partners, the suggestion being because of their status within the firm, they are perceived to be working on many, or bigger matters and therefore Trainee 2 has the opportunity to become more involved thereby shaping the context of her information needs and her knowledge development. Trainee 2 is in the

Commercial Litigation seat [situation] and sits with [situation], and carries out work for her supervisor who is not just a solicitor within the firm but a partner [status]. She also carries out work for another solicitor, who is not only a partner but is also the head of the Commercial Litigation seat [status], which makes it possible for her [opportunity] to become more involved in, and therefore learn from, larger case matters.

4.2.4.1d Task Initiation: Nature of task

4.2.4.1d(i) 'Task initiation can be dependent upon the work being of a more procedural nature, cheaper for the client, easy or unusual in nature'.

The procedural nature of the given tasks would not appear to be unusual as both Trainee 2 and Trainee 1 also mention the learning of procedures in relation to the tasks they were allocated within litigation (CLP2/CLP9). However, for trainee 3 the legal research given was noted as being, *'really complicated and it will be some really bizarre point of contract law that one of the partners has looked and couldn't find and then ask me to have a stab at it'* (CLP32). This suggests that these tasks were more unusual in nature with their initiation being as a result of a perception that the solicitor has been unable to find it themselves. It is interesting to consider this perception of why given legal research with that of Trainee 4 above who felt that the solicitors already knew the answer but wanted confirmation. Tasks were also suggested as being allocated where they were considered too easy for a more qualified solicitor to carry out and if carried out by a more qualified solicitor would prove too expensive to the client. The portrayal of being given the cheap and easy work, *'That's it really, cheap, easy'* (CLP33), although said in good humour with no sense of disappointment, can be interpreted as stereotypically describing the role of trainees; as the trainees are beginners and not fully qualified, then their hourly billing rates will be cheaper than that of a more qualified solicitor and as a result of this beginner status in the firm are likely to be given the easier tasks to undertake, easier in that they are perceived as being too easy to give a qualified solicitor, and therefore not worth the costs entailed if a more qualified solicitor was to undertake the task. However, the allocation of procedural, unusual or easy tasks can be said to offer

the trainee with a mixture of opportunities and experiences, which in turn will shape the context of her information needs and behaviour; in finding out and learning about a range of differing tasks and therefore also increasing her potential for knowledge development.

4.2.4.2 Task Initiation: Property

In contrast, within the Property seat the factors identified surrounding task initiation included; ‘confidence’; ‘typical trainee tasks’ and ‘busyness’.

Through an analysis of the Trainees’ narrations within Property the realities surrounding ‘perception of task initiation’ can be characterised in the following ways;

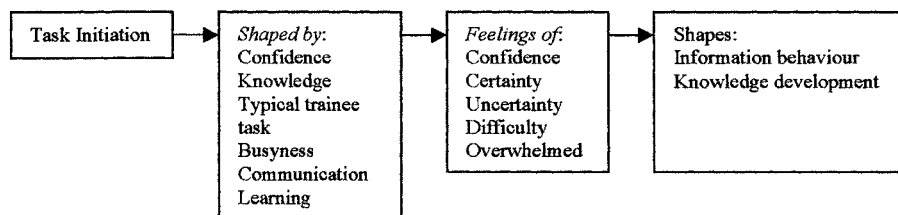


Figure 18. Task initiation within Property

4.2.4.2a Task Initiation: Confidence and Knowledge

4.2.4.2a(i) ‘Task initiation, when shaped by confidence of the supervisor in the trainee’s ability to undertake the task as a result of their knowledge of the trainee’s work, can lead to the trainee being given more responsibility thereby increasing the potential for learning. This confidence in the trainee, when coupled with the trainee’s own knowledge as a result of prior experience, can in turn boost the trainee’s confidence in their ability to undertake the task, thereby potentially shaping the trainee’s information behaviour, however, despite a boost in confidence, feelings of difficulty can arise, but these feelings of difficulty can to a certain extent be alleviated where there is a shared confidence between the trainee and the solicitor’.

For example, increased responsibility in the tasks allocated to trainee 2 is an indicator of the confidence that the solicitors have in her as a result of her prior experience in the seat and their knowledge of her prior work, *'I don't have so much research to do in this seat because when I came to the department they were quite a few junior lawyers down so because I had done a seat in property before, rather than treat me as a trainee and just get me to do the registrations and the research, they actually gave me quite a lot of responsibility which is good because you learn a lot quicker'* (P37).

Trainee 2 appreciates the extra responsibility suggesting that it increases her speed of learning and therefore her knowledge development. It is also likely that this confidence in the trainee's ability has encouraged Trainee 2's work-related self-efficacy, in feeling capable of handling this extra responsibility and to undertake different tasks. Self-efficacy is concerned not with the skills one has but with judgements of what one can do with whatever skills one possesses (Bandura, 1986:391). Being given added responsibility and differing tasks to undertake will also shape her information behaviour and knowledge development. Being faced with the needs of a range of tasks will enable her to acquire a broader knowledge of the legal area and its procedures.

For Trainee 5, initial thoughts of being given the task simply because the supervisor had not had time to contact the solicitor for the other party, *'I thought he was giving me it cause he just hadn't got round to ringing them up just to sort of find out where we are with it'* (P18), were found to change on tackling the task, where the task was found to be more difficult than initially perceived, *'it was really trying to get the purchaser's solicitors to respond because he was really non-responsive and it was really kind of that, that was difficult and the partner had found it difficult to deal with him to get any sort of feedback from him'* (P19), resulting in the trainee perceiving that she had been given responsibility for the task because she had had a successful experience of a similar difficult task previously, *'and I think cause I had done it with one of the ones previously and I had the guy on the other side of that giving me quite a hard time but then he had rung up to apologise and he rung up the partner to apologise for giving me such a hard time and that worked out okay so I think*

that's why he passed on other things as well'. (P18). This would suggest not only an increased confidence on the part of the solicitor in the trainee's ability to tackle the task as a result of her previous success but in the trainee feeling more confident as a result of the supervisor's confidence in her, and confidence as a result of her prior success. Furthermore, confidence as a result of the trainee's prior success and the resultant confidence in her work by her supervisor will potentially shape her information behaviour in undertaking the task, utilising what has been learned from her previous success with a similar matter. However, despite this confidence, feelings of difficulty in undertaking the task are highlighted '*that was difficult*' and further re-enforced with her acknowledgment that '*the partner had [also] found it difficult to deal with him*'. Both Trainee 5 and her supervisor, as a result of the task and similar findings, have created a 'shared belief' regarding the purchaser's solicitor and in the 'difficulty' of trying to get a response. This shared belief is indicative of the influence that work relationships can have on a trainee's learning. Stein (1998:3) suggests that 'it is the process of interaction with others that produces and establishes meaning systems'. For Trainee 5, this shared meaning that a difficulty exists is likely to have had some influence on her attitude and approach to the task, to not being totally discouraged by this lack of a response, it being expected and this expectation confirmed by her supervisor.

Confidence can be posited as contributing to why a trainee is given a particular task and to a trainee's affective feelings or feelings of self-efficacy in relation to her ability to tackle a task thereby potentially influencing the trainee's information behaviour in carrying out the task. Trainee 5 as a result of a shared belief with her supervisor of the difficulty has formed what Kuhlthau (Kuhlthau & Tama, 2001:27) refers to as a more focused perspective of the problem and as a result is motivated to continue seeking the appropriate information to be able to complete the task, and is likely to learn from the experience of the task and its problems. Motivation is considered a key affecting factor as regards information need and seeking (Wilson & Walsh, 1996:14, Kuhlthau, 1991:363).

For a dialogue to occur between Trainee 5 and the purchaser's solicitor will require a 'shared language', 'to communicate effectively there is a need for a

‘shared language’ (du Toit, 2003), to enable a shared understanding of the task situation. Through this dialogue, Trainee 5’s knowledge development as a result of this task is likely to be a mixture of explicit knowledge (being able to explain the nuances of the situation to the purchaser’s solicitor and her supervisor) and tacit (knowledge acquired as a result of the communications with the purchaser’s solicitor, for example, through repeated communications Trainee 5 is likely to be developing an insight into how best to, or how best not to, approach the purchaser’s solicitor in order to get a result).

4.2.4.2b Task Initiation: Typical Trainee Tasks

4.2.4.2b(i) ‘Task initiation can be shaped by what are perceived as being ‘typical trainee tasks’; tasks considered appropriate, that enable the trainees to learn what to do and to familiarise themselves with the legal area and its procedures, thereby shaping their information behaviour and knowledge development, however, these tasks can still lead to feelings of certainty, uncertainty and difficulty’.

For example, Trainee 2, whilst in Property for the first time provides a range of explanations as to why she perceives she was given certain tasks from what she considers are typical beginner tasks, to ‘*train you up*’, ‘*get you started*’, and ‘*find your way around*’ (P35). Research is further highlighted as a typical trainee task, ‘*I have been involved in a few of the bigger projects with one of the partners and on those you get little bits and bobs to do, just helping the transaction along such as if there is research to be done as to how to register something at the Land Registry then that is a common trainee thing to do, so I’ll be doing things like that, or stamp duty and new laws just started on that so that is a common trainee thing to do because none of the actual fee earners knew their way around it yet because it is quite new*’ (P36). The range of tasks given to Trainee 2 to help her find her way around will each shape her information needs and knowledge development. Interestingly, despite suggesting that she is given tasks such as research into new laws on stamp duty, purely because they are new, she does not appear to express any uncertainty. This is perhaps because she perceives that the fee earners [solicitors] will not yet know their way around them, and therefore it

is new to both trainee and solicitor, resulting in her feeling more confident thereby reducing levels of uncertainty about her own ability to be able to research into these new areas to satisfy the needs of the task. Trainee 2 can be said to be experiencing what Kuhlthau (Kuhlthau & Tama, 2001:27) refers to as optimism at the selection stage; however in this instance Trainee 2's optimism appears to be at the initiation stage; if nobody knows the laws then whatever the trainee finds will be useful.

However, being allocated a typical trainee task was found to potentially result in feelings of uncertainty for another trainee. For Trainee 6, when involved in drafting [documents] and advising [writing instructions to council], considered typical trainee tasks (Law Society, 2005:12,13) within a compulsory purchase matter, a lack of knowledge of the law and its procedures led to initial feelings of uncertainty, *'I had obviously heard of compulsory purchase but I didn't know anything about the law. I didn't know anything about the procedures or anything' (P24)*. This uncertainty changed on then being directed to the actual resource that she should refer to, to the precedents which will help guide her in her task, *'they are referred to in the regulations – and they referred me to them – we have like precedents to work from, and so that wasn't too bad' (P24)* and in contrast to Trainee 2 above, is more reflective of Kuhlthau's (Kuhlthau & Tama, 2001:27) selection stage, by being directed to the precedents to be used Trainee 6's initial uncertainty changes to that of increased optimism. Furthermore, the team approach to this task is indicative of a community approach to learning. *'Through community, learners interpret, reflect, and form meaning' (Stein, 1998:3)* The team approach to this task is suggestive of the further potential for the trainee to learn from that community, through the sharing of knowledge. And this sharing of knowledge could further reduce feelings of uncertainty in the trainee, for example, as a result of feeling able to seek information from the team as required.

4.2.4.2c Task Initiation: Nature of Work - Busyness of Seat

4.2.4.2c(i) Task initiation and the resultant information behaviour and knowledge development can be shaped by the busyness of others; the amount of

matters requiring attention which, where there is poor communication, can result in feelings of uncertainty and of being overwhelmed, however, learning to say no can alleviate these feelings and increase confidence in one's own judgement'.

For example, Trainee 1 emphasises the busyness of the Property seat and suggests this as the reason why she was given certain tasks, *'the whole department is busy and I think it was sort of oh great trainees in and at one point I ended up and I had 6 people asking me to do some work' (P27)*. Linked to the amount of work that was required, Trainee 1 faces uncertainty, not in relation to what she has been asked to do, but in relation to her ability to cope with the amount of work she was being asked to do, *'eventually I had to say no I can't do it, there's a limit to how much a human being can do in a day. I said you either give it to me and it gets done badly or you don't give it to me cause I physically can't do that amount of work. I remembered at the time saying that and thinking should I have said that, as a trainee should I have said that? I thought about it and I said no you've got to otherwise they are going to be looking upon you really badly going gosh you haven't done that yet, or three weeks later oh why didn't she say at the time?' (P28)*.

The sheer number of tasks being allocated to the trainee does appear to influence the trainee's approach to the task and therefore her resultant information behaviour. The number of tasks potentially limits the time spent on identifying the information required to meet the needs of the task, in addition to influencing her ability to learn from these tasks as suggested by *'either give it to me and it gets done badly or you don't give it to me cause I physically can't do that amount of work'*. Trainee 1 also reflects on whether she should have said what she said, demonstrating feelings of uncertainty. These feelings quickly change to that of confidence and increased certainty in her own judgment and suggests a 'bringing to bear', at that time, an awareness and understanding of the consequences of not acknowledging her ability to cope with the workload. Linked to this Trainee 1 is highlighting her feelings of concern as to how others might perceive her if she was not to question the amount of work she was being given. In addition, Trainee 1 is demonstrating an understanding of herself; she is bringing to bear at that point in time her knowledge and her perception of her own abilities in relation to

what she realistically feels she can cope with, *Trainee 1 – ‘And I think that knowing your own limits, knowing when to say no’ (P29)*. Trainee 1’s concern as regards the number of tasks being allocated to her is also indicative of feelings of difficulty in coping and of being overwhelmed by it all, *Trainee 1 – ‘in your first month you’re going, oh my... files and files, and you think woo!’ (P32)*.

Trainee 1 also links her belief that she has made the right decision to say ‘no’, to learning, *‘So again I think that again is something that, valuable to learn, at the end of the day we are trainees and we’re almost bottom of the pack and you’ve got to be able to say at some point, hold fire, and it wasn’t them being just oh trainees pile the work on, it wasn’t at all’ (P30)*. Trainee 1’s example provides some evidence of a lack of understanding amongst staff within Property as to what the trainees might be working on, suggesting a potential lack of communication across the department as a whole, *Trainee 1 – ‘No they didn’t have a clue that I was sitting working for how many and when I said, you know can we hold fire a minute I’m working and they said, you’re doing what for, oh my goodness right okay, don’t worry about it’ (P31)*.

The nature of work, uncertainty, confidence, and difficulty are identified in relation to Trainee 1. The seat is very busy and Trainee 1 experiences uncertainty in relation to her ability to cope with the amount of work she is given to do. Due to her lack of experience as to what is acceptable behaviour for a trainee, she worries about whether to question or not the amount of work she is being given. She becomes more confident and certain as she begins to trust in her own judgement, deciding to say no to the demands being placed on her, despite concerns as to how she would be perceived by others. Difficulty in relation to Trainee 1 is as a result of her initial feelings of not being able to cope. The nature of work, being so busy, is suggested as influencing the trainee’s ability to cope with the work which in turn will shape her approach to tasks, her information behaviour in undertaking tasks and her knowledge development, not being able to do the tasks thoroughly *‘either give it to me and it gets done badly’ (P28)*.

Trainee 1’s situation is reflective of what Wilson and Walsh (1996:9) refers to as stress/coping theory. As a result of too many demands being placed on Trainee 1,

stress is apparent through her emotional outburst as a result of the unpredictability of her situation; feeling that she is unable to cope with the amount of work and as a result feeling unable to carry out the tasks to the best of her ability. At the same time this outburst is a form of coping as it results in her being enabled to manage the problem, through admitting her worries concerning the amount of work she is being allocated. Furthermore, the coping strategy adopted is as a result of her fear of the consequences of not admitting her inability to carry out the work, a fear that others might perhaps perceive her to be slow or incapable of managing her workload. This would suggest that stress/coping theory has some influence on a trainees' approach to work and in their ability to learn. It can also be seen to be linked to self-efficacy where one's 'physical/ affective status can be linked to, for example, stress and anxiety, where learning is optimum when appropriately challenged but under conflicting conditions learning can be impaired (Brown, 1999:3). Trainee 1's conflicting feelings regarding whether to say no or not to the amount of work, and her concern as to the potential impact that this might have, is likely to impair her potential for learning.

Within the Property seat, perhaps because of the types of tasks, being more 'complete' in nature and therefore resulting in more detailed narrations, a clearer picture of the information needs and knowledge development of the trainees is beginning to emerge. Trainee 5 needs to learn how to deal with the other solicitor. Trainee 6 needs to find out and learn more about the legal area, its associated procedures and language and to put this knowledge into practice. Trainee 1 is finding out about what is acceptable behaviour and learning to trust in her own judgement. Trainee 2, due to her experience, is given more responsibility and acknowledges how this increases her learning.

The perceptions of the trainees as to why they were given certain tasks is revealing in terms of their feelings on being given these tasks and how these feelings can shape their experiences of tasks and their resultant information behaviour. However, in order to capture their information behaviour and its influence on knowledge development in more detail, an exploration of how the trainees approach tasks proves insightful.

4.3 Information Need

How do the trainees approach the task they have been allocated?

By considering how the trainees approach the tasks they have been allocated, a richer picture of their information needs and knowledge development begins to emerge.

Kuhlthau (2001) and Leckie Pettigrew and Sylvain (1996) identified that lawyers when seeking information were found to use a range of resources including internal and external information resources, colleagues and contacts, as well as the individual's own knowledge. Leckie, Pettigrew and Sylvain (1996:184) also suggest that personal knowledge and experience also encompass the different ways that work is conducted or practiced. Such differences are thought to influence which sources professionals use and might also contribute to more habitual patterns of information seeking. In addition, direct or indirect knowledge of resources, and the perception of the process or information retrieved, are thought to play a crucial role in the overall information seeking process. Therefore, the individual's general awareness about information resources and or their content can determine the path that information seeking will take. The key important factors identified were familiarity and prior access, trustworthiness, packaging, timeliness and accessibility (Leckie, Pettigrew and Sylvain 1996:185).

Within the key theme 'approach to tasks' the emerging shaping factors identified in relation to the information behaviour of the trainees in this research are; 'guidance', 'people as resources', and 'perception and use of published resources'.

4.3.1 Information Need: Guidance

Empirical evidence suggests that guidance, in its various formats, helps shape the information behaviour and the knowledge development of the trainees. This is

not unexpected as the trainees are learners and are therefore likely to need guidance as to what to do and ideally will learn from that guidance. However, guidance was found to vary in approach and depth, and the information behaviour and knowledge development of the trainees as a result of guidance was found to be influenced by a range of further shaping factors.

From an analysis of the trainees' narrations 'guidance' can be characterised in a number of ways;

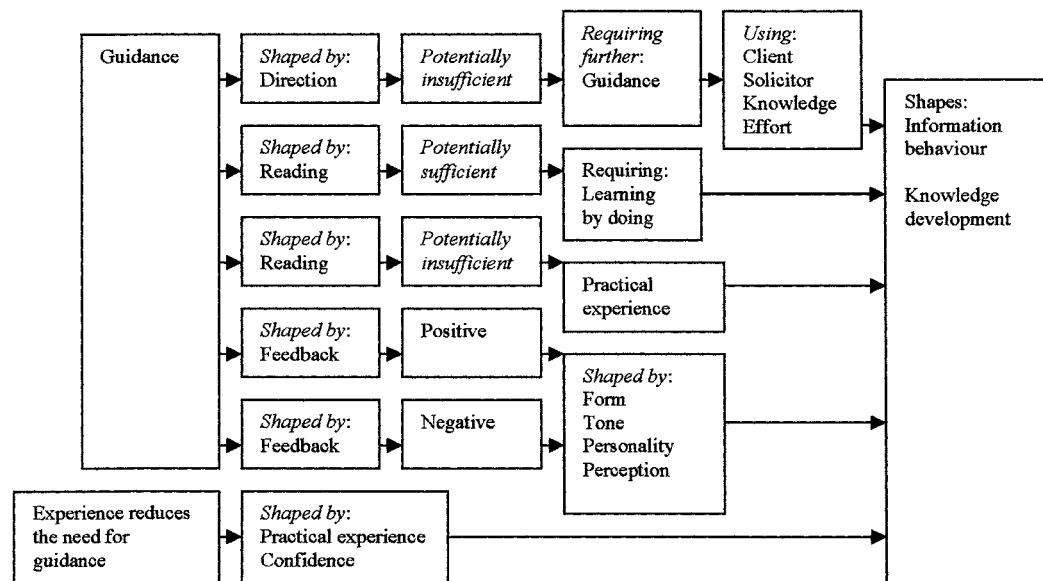


Figure 19. Shaping influences of guidance

4.3.1a 'Guidance in the form of direction as to what to do can prove insufficient in itself requiring additional guidance through further information seeking from a variety of resources'.

For example, for some trainees guidance in the form of direction was offered at the beginning of the task. Trainee 5 (P40) was directed to 'ring' to find out if they were ready to exchange, and Trainee 6 was directed to read about the practice area, '*they suggested that I read*' (P42). This initial guidance however, often only suggests where the trainee should start and does not necessarily suffice for knowing how to approach the task as a whole. For example, Trainee 5, (P40) although guided as to what to do initially, then found herself in charge

of the file and in need of further guidance, to learn what to do, *'trying to work things out and fumble my way through with the client, talk things out with the client, chat to him about it. Or go back and see the supervisor to find out what to do' (P41)*. This further guidance was sought, not only from her supervisor, but through discussion with the client. Through approaching her supervisor and through discussion with the client the trainee is seeking further guidance in the shape of information on the file, and knowledge as to how to proceed with the file. This seeking of further guidance enables the trainee to identify what to do next. The trainee is therefore learning, developing her knowledge as a result of her information seeking approach to the task.

Trainee 6, was directed to read documents, *'I went to them, I did the reading and I looked at them and then obviously I had to adapt them and change them, change all the names and things and look at the information, there was quite a bit of drafting involved, you have got to draft a schedule so you needed like more information, so I think that some of the information was got, but like we had quite regular meetings to discuss how things were going and who was doing what' (P44)*. This would suggest that there were further guidelines in the material she read as to how to format the drafts but that there was still a need to seek further information. In resolving her information need Trainee 6 was found to seek information from the team with whom she was working with, but where she encounters some difficulty with her knowledge of terminology, she was found to seek further guidance from someone whom she perceives 'knows', *'I didn't really know how to, how to phrase things almost or how official, you know what type of language you are supposed to use. So I think I went to see one of the partners who has done a few before about that' (P45)*.

Both examples provide evidence in support of Kuhlthau's (1991:362) epistemology that a users' state of knowledge is dynamic rather than static, changing as he or she proceeds through the process. The trainees' knowledge is changing as they progress through the task, and as a result of their information seeking behaviour, and provides some evidence in support of Limberg's (1999) findings, that 'information seeking is not independent of the content of information'.

4.3.1b 'Guidance as to which resources to use is potentially unhelpful and can suggest a need to already know where to look or to make more effort to find out where to look, and thereby shapes their information behaviour and knowledge development'.

For example, initial guidance can be communicated via a memo or via face-to-face instruction. Interestingly, in the examples narrated by Trainee 4 (CLP47), although both formats of instruction offered guidance as to which resources to use, with the exception of 'statutes' and 'precedents', resources likely to be familiar to both trainee and solicitor, the rest are general in nature, *'either go and look up a book, look on the Internet or phone them up somewhere in France'* (CLP47). According to Wilkinson (2001:259), it is part of the lawyer's professional expertise to know exactly where the information relevant to the legal problem is. However, being directed to general types of resources such as books, Internet, and telephone, raises question around whether the solicitors do know specifically where the trainees should look or whether they are just not sharing that knowledge. If the former then this is potentially indicative of the solicitors, as a result of being so used to using their own knowledge in the practice area, having now forgotten the titles of the appropriate resources. If the latter, then the solicitor, as a mentor, is potentially not facilitating the learning of the trainee as well as he/she could. For example, a mentor is said to facilitate learning by modelling problem solving strategies, by coaching learners using appropriate scaffolds or aids (Kerka, 1998:3). Directing Trainee 4 to look up a book or go onto the Internet does not appear to be a useful directional aid. Equally, this lack of specific direction, could be indicative of 'busyness' and a lack of time, but even so, where given general guidance of this nature it would suggest that the trainee would either need to already know where to look; or to know of specific resources to look in; or to make the effort to find out; or to seek further help as to where to look, and thereby shapes his information behaviour and knowledge development.

4.3.1c 'Guidance to read about a matter can on its own prove insufficient for learning about a task, and can require supplementary 'learning by doing'.

For example, Trainee 5 (P40) was found to be guided by the file itself, through reading the file she was able to decide, to learn what needed to be done.

However, reading as a form of guidance was not always found to be fruitful.

Trainee 2 (CL) notes being guided to read documents, to help familiarise her with the task, however, these documents consisted of *'about 30 lever arch files'* (CLP43), and led to a perceived inability to take it all in, *'So I sat down and I read most of it but you get interrupted and all the rest of it so it is difficult to actually completely read the, a lot of it is just, although you are reading it it's like in any situation, you get lots of documents to read and you end up getting bogged down in all the detail and you think well actually its better to keep to the core'*. Trainee 2 (CL) suggests that rather than learning about the task through the reading of materials, it was the actual *'doing practical things on it'* (CLP43), that better enabled her to learn. This is also indicative of this trainee's preferred style of learning; to learn from the concrete experience of doing.

4.3.1d 'Experience can reduce the need for guidance'.

Whereas Trainee 2 was provided with guidance whilst in Commercial Litigation, this does not appear to be the case within Property where despite being given more responsibility she does not indicate seeking guidance as much as the other trainees. Not requiring guidance is potentially as a result of her prior experience of practice within Property, and her resultant confidence due to that prior experience, as discussed in section 4.2.3.2 above.

4.3.1e 'Guidance in the form of feedback can have a positive and, or, negative influence and its provision can be dependent upon personality. The form and tone of feedback shapes how information is transferred and depending on how it is perceived by the trainees can potentially shape their future approach to tasks, and therefore their information behaviour and their knowledge development'.

For example, guidance in the form of feedback was found to potentially have both a positive and a negative outcome on the trainees' behaviour in their approach to tasks. Positively, feedback in the form of scribbles on work returned to Trainee 3 (CLP36) suggests the potential to learn from these, and to approach the task differently in the future. These scribbles, by their very nature illustrate where the trainee has gone wrong and could, as a result, have a negative influence on the trainee. However, Trainee 3 seemed to take a more positive stance; as the scribbles become fewer this demonstrated to her that she is getting better. In contrast, Trainee 3 was not always given feedback, *'and it really annoys me, it really annoys me if I do a piece of work and I have done it wrong and they won't tell me cause they think they are going to hurt my feelings'* (CLP119). Trainee 3 suggests that she does not get feedback where having done the work wrong because she feels they do not want to hurt her feelings. The outcome of this is that Trainee 3 is not enabled to learn as there is no feedback to learn from and as a result neither she nor the solicitor meets the shared objective; for the trainee to learn from the solicitor's experience and to learn from the task.

In contrast Trainee 2 suggests that she is always provided with negative feedback, *'you always get negative feedback if there is something that needs improving on or if you have done something wrong. I have found in this seat you don't tend to get as much positive feedback but that also depends on the person you work for, their personality as to whether they think that you need it or not or they are just possibly not aware of it. Whereas in the last seat I was in Property, ehm, you got usually both positive and negative feedback depending on what you had done and they were quite tactful in the negative feedback. And I think that just comes down to the personalities involved really'* (CLP143). In Trainee 2's narration there is a clear difference between the seats in relation to the type of feedback provided, with Property being perceived as providing both negative and positive feedback, but with Commercial Litigation only providing negative feedback. Personality is suggested as being a key shaping factor, and is perhaps indicative of how the trainees perceive the individual solicitor's sensitivity to their needs and their feelings of uncertainty, where those who take the time to provide feedback, whether positive or tactfully negative, are sensitive to the fact that the trainee might be feeling uncertain as to their performance and need this

feedback to enable them to learn and develop. Those who do not provide feedback are perhaps perceived as not being sensitive to the needs of the trainees. In an example provided by Trainee 2, verbal feedback from Trainee 2's supervisor encouraged her to reflect on what she could/should have done, that is, to check with the court, *'He said well maybe you should just phone up the court and just say look it's an appeal and just check that, that is the correct person to send it to'* (CLP45). Despite justifying to herself that it was because of the urgency of the matter that she took the approach she did, *'cause it had to be dealt with quite quickly but a lot of the time you are so desperate to get it out and actually finish the task you been given that you don't necessarily stop and think oh well I need to phone the court just to check that that is the case and so forth'* (CLP46), it is likely that she will review this approach in the future, seeking further information rather than relying on what she thinks is correct thereby potentially resulting in a positive learning outcome.

Feedback was found to have both a positive and a negative influence on Trainee 4's (CLP48, CLP23, CLP24) information seeking behaviour. On the one hand reflection on the feedback received alerted him to the need to ask questions at time of instruction, thereby learning to seek further information at time of instruction. But on the other hand, this feedback, due to the nature of the feedback, *'you shouldn't have come back to me then'*, resulted in his feeling reluctant to return to solicitors for further guidance on future tasks, *'I've got nowhere and I think to myself oh I don't want to go back to the partner and say I've not done anything but I've spent this amount of time on it'*, preferring now to approach other trainees, and only approaching solicitors as a last resort, *'and I would quite often go to her [another trainee] and say what do you think I should do? What have you done in this situation and she has said don't be stupid, go and speak to them, no point in wasting any more time'*. This feedback has shaped his information seeking behaviour in a negative way, stopping him seeking guidance from those from whom he could potentially learn most.

The above examples provide some evidence of the role that social factors can play in inhibiting the learning process. As learning is social and situated then it can be posited that context provides the setting for examining experience and that

the social community provides the shaping of the learning (Stein, 1998:3). In this instance interpersonal social issues were found to shape learning, whether considered to be as a result of fear of upsetting the trainee, or through the tone of the communication, or as a result of personality. The trainees' reasoning behind their being given feedback or not is interesting, and is suggestive of their having formed an evaluation of why this is the case, constructing a belief that it is as a result of, for example, the personality of the solicitors.

Feedback can be seen to be important not only for 'learning', as to whether one has carried out the work correctly, but in relation to the affective feelings of the trainee, a need for re-assurance that they are doing a good job. This need for re-assurance is indicative of a trainee's potential ongoing feelings of 'uncertainty' despite having completed a task. This would suggest that feedback is an important contributory factor in the building of a trainee's confidence and certainty in work matters.

Trainee 4 and Trainee 2's experiences can be linked to Leckie, Pettigrew & Sylvain's (1996) concept of the feedback loop. 'As a second round of information seeking is undertaken, the configuration of factors that come into play may alter. Whereas previously the individual may have sought information informally, because this was perceived to be timely, through feedback it was discovered that the information gathered, was not in fact very accurate. Therefore, in the next round of information seeking, it is likely that a completely different mix of source and awareness factors will be involved.' In Trainee 4's case, the configuration of factors has indeed altered, but not as a result of the feedback that the information was inaccurate, but as a result of the nature of the feedback itself. Trainee 4 still uses the same mix of resources but it is the order that these resources are consulted, and his increased awareness of the acceptability of approaching these resources, that has changed. For Trainee 2, the feedback from her supervisor altered her approach but it also resulted in Trainee 2 reflecting upon her initial approach

4.4. Information Seeking

4.4.1 Information Seeking: People are key resources shaping the information behaviour and knowledge development of the trainees.

Wilkinson (2001:265) suggests that lawyers overwhelmingly rely on informal [people] sources to satisfy their information needs.

Evidence from this research suggests that people do indeed play a key role in the social world of the trainee. Linked to the seeking of guidance above, people were found to be key resources when seeking information. However, use of people was found to be influenced by a range of shaping factors including, time, accessibility, personality, approachability, knowledge, learning by doing, uncertainty, perception of acceptability, perception of who knows, culture, task, person's practical experience, ability, expectation, ability to express need, urgency, trust and effort.

From an analysis of the trainees' narrations 'people as resources' can be characterised in the following ways.

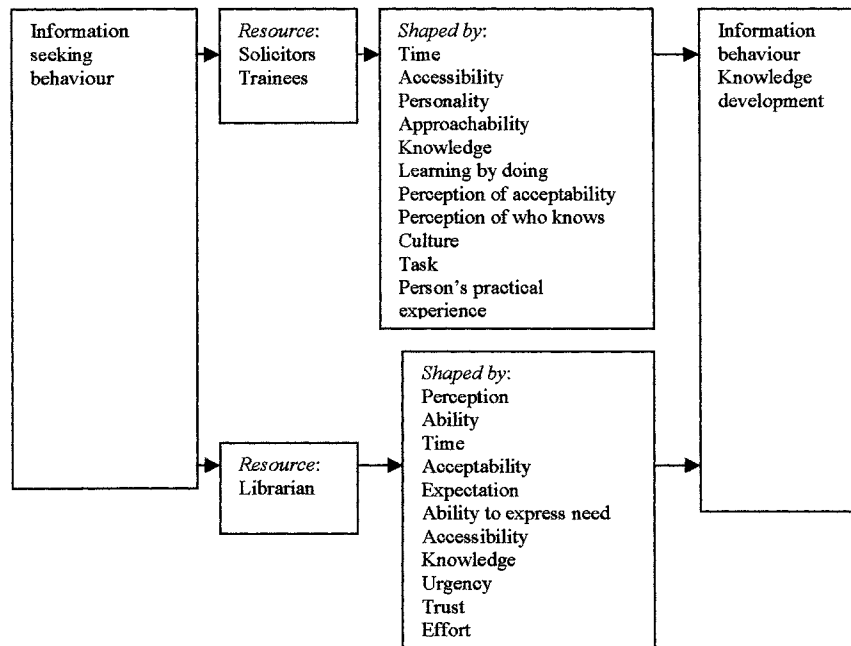


Figure 20. People as information and knowledge resources

4.4.1a 'Perceptions surrounding 'time' can lead to the belief that it is better to seek information by asking and the ability to ask can be made easier by a person's accessibility, personality and approachability'.

For example, when within Commercial Litigation, Trainee 1 and Trainee 2 were found to turn to their supervisors, *Trainee 1 - 'I know that anytime of day, provided she is not very busy, I can ask if she [supervisor] has five minutes, which is great' (CLP86)* and *Trainee 2 - 'I would tend to ask the partner [supervisor] that I sat with cause I get on quite well with him and he is quite chatty and we chat quite a lot' (CLP103)*. The trainees' use of their supervisor is indicative of their information behaviour and knowledge development; to seek guidance from the supervisor and learn from that guidance. Accessibility is made easy for both trainees as they both sit with their supervisor, however, whereas the 'accessibility' of the supervisor for Trainee 1 acts as a motivator in that she feels that she can approach her supervisor at any time for guidance, 'busyness' is potentially a barrier that could cause Trainee 1 to have to re-consider her approach, to re-consider her information seeking behaviour. It would appear however that Trainee 1, where she is unable to seek help from her supervisor,

would still tend to ask around, believing it to save time; time that she does not have to waste, *'So you get wise to the fact that if you ask around somebody somewhere will know. I think when you first start you think you can't ask, it'll make me look really like I don't know what I am doing, but you really do wise up to that because otherwise you could spend days and you just haven't got the time'* (CLP42).

Trainee 2 suggests that she tends to ask because of her good relationship with the partner combined with his personality, being chatty, making it easier for her to ask, but as with Trainee 1 she also emphasises 'time' as a shaping factor, *Trainee 2 – 'a lot of the times it is easier just to go back rather than spending half an hour searching through all the files and the letters and correspondence and things trying to get to the bottom of it, it would actually be quicker especially if it is in the sense of for the partner I am working for is in the room, and it is one of his files, it is easier to say hang on a second why did he do this? You know – that is a lot quicker'* (CLP104). Trainee 2, as with Trainee 1 is making good use of time, suggesting that, where the work is for the partner with whom she sits, it is both easier and quicker to ask.

Within Property 'friendliness' and 'approachability' of staff were highlighted in relation to being enabled to ask, *Trainee 1 - 'the department I'm in is very friendly, very approachable and there's a lot of people that I know now that I can go to and say what am I doing and they will tell me'* (P49), and when uncertain as to what to do, Trainee 2 prefers approaching others as her first port of call believing that *'it is a lot easier to speak to somebody who has done it before'*. The main difference between the two seats is that the trainees, when in property, do not necessarily sit with the people for whom they undertake work, suggesting that accessibility could potentially prove to be a problem, however getting to know the people in Property, its friendliness and approachability as indicated by Trainee 1's narration suggests this not to necessarily be the case. In addition, whilst in Property, the trainees were also found to suggest that their preference was in the first instance 'to have a go' at the task themselves, to do as much as they could, and only where uncertain to ask. However, this does not necessarily mean that the trainees, whilst in Commercial Litigation, immediately ask rather

than tackle the task themselves, but that where 'time' was of the essence it was perhaps considered quicker and easier to ask, particularly where sitting in the same room as their supervisor.

Emotional space through receptive listening (Baker, Jensen & Kolb, 2005:424) is highlighted as shaping conversational learning experiences. Approachability and friendliness are indicative of 'receptive listening' and as a result can be said to encourage the learning of the trainees.

4.4.1b 'Knowledge, learning by doing, uncertainty, a perception of acceptability and a perception of 'who knows' can stimulate the trainees' behaviour when tackling tasks and the seeking of information from others'.

For example, within Property, the trainees suggest that when given a task they will 'have a go', doing as much as they can before going back to seek advice from a supervisor or member of the team. Trainee 5 (P40), as she takes charge of the file is able to identify at what stage the file is at and what needs to be done next, suggesting recognition and therefore knowledge of the matter, and only where uncertainty arises whilst working on the file does she go back to her supervisor. Trainee 2 (P50, P51) was found to be immersing herself in the task through the familiarisation with, and reading of, the documents and using her knowledge acquired as a result of her learning at University, Law School and the firm, to make sense of the documents, to 'identify' and 'figure out' what is appropriate, thereby learning by doing, and only where uncertain checks with another member of the team. Trainee 1 does her best to 'figure it out' herself, suggesting use of knowledge before seeking help from the solicitor who allocated the task. Trainee 6 notes that she will, '*have a go and I'll put down what I think it is and then maybe when it came to actually having to finish it I'd go and see, and say I've done this, I've done it like that because I think that but I'm not sure how that is supposed to be done.*' However, Trainee 6's (P46) approach 'to have a go' can be said to be as a result of not only her belief that '*you learn more if you do it yourself*' but to her perception of how her behaviour would affect others if she were to '*pester them all the time*', where she suggests that they would get '*bored*' with the trainee. Trainee 6's interpretation of how

others might feel about her was she to ask all the time is perhaps suggestive of her perception of the acceptability of asking.

Within Commercial Litigation Trainee 3 (CLP20) is selective about who she approaches, perceiving that not everyone will know something about the tasks she is undertaking. Trainee 1 (CLP39), despite not always being initially successful at identifying someone who can help her, still perceives that 99% of the time there will be someone who can help guide her as to where to start, and as a result of that perception, where unsuccessful, continues to ask around in her belief that this will ultimately save her time. Trainee 4 (CLP50) suggests that as the other trainees are likely to have carried out similar tasks they are potential sources for guidance as to how to approach tasks. Trainee 3 (CLP36) chooses a certain trainee as she perceives that they will know more because of time served within the seat.

4.4.1c 'Asking around is potentially indicative of the culture of the seat'.

In Commercial Litigation Trainee 1 appears to prefer to ask around as a result of her belief that there will be someone out there who can direct her as to where to start on a task and Trainee 4 was found to seek help from the other trainees who had experience of Commercial Litigation. This notion of 'asking around' can perhaps be explained by the culture of Commercial Litigation where discussion is common between the trainee and the supervisor as highlighted in 4.2.3.3 above, and perhaps as a result of this discussion culture, Trainee 1 and Trainee 4 feel it is acceptable to ask around. It could also be due to personality but given the different behaviour of Trainee 1 who is found to have worked in both Property, where she indicates 'having a go' herself, and in Commercial Litigation, where she asks around, this would not suggest that it is as a result of personality. This notion of a discussion culture leading to an increased acceptability of 'asking' is in itself inconclusive evidence however, as neither Trainee 2, perhaps because of her prior experience, nor Trainee 3, perhaps because of her situation, not sitting with her supervisor or working as part of a team, indicates asking around to the same extent as Trainee 1 and Trainee 4. In addition 'asking around' is not necessarily the same as discussion. 'Asking' is

suggested however as being a part of the culture in the Property seat where Solicitors were found to 'ask each other' suggesting that there is also a culture within that department for colleagues to use each other as sources of information, *'have you heard of this before?'* (P73), and *'what do we do if they can't find a precedent for it?'* (P73). However, whichever approach the trainee takes, to ask or to tackle the task themselves first, is likely to contribute to their information behaviour and knowledge development. Asking around, although not necessarily suggesting discussion, will still inform the trainee as to where to look or who to approach, thereby offering the potential for the trainee to build up their own knowledge of resources. This can be linked to a more accommodative style of learning, where on the one hand, the trainees, having reviewed their situation, reason that it is better to approach others (taking a pragmatic approach), who may or may not know. And, where deciding to tackle the task, the trainees have the opportunity to learn by doing, taking a more activist approach to their learning.

4.4.1d 'The approach to information and knowledge seeking is dependent upon task but is made a lot easier by speaking to someone who has practical experience of the task'.

For example, Trainee 2 notes that, *'nine times out of ten you are a lot quicker to go and ask somebody because the chances are they have dealt with the problem before, they know how to answer it and I always find it easier to have it explained to you by someone in layman's terms rather than having to sit there and figure out what the book actually means. If someone has had it before then in practical terms this is what you do when you are faced with this problem'* (P108). Trainee 2's perception of what others will know, speed, preferred approach to learning (to have the matter explained to her in layman's terms), and easiness (being told in practical terms rather than having to work out what the book is implying herself) would appear to be influential factors. However, this did depend on the task itself, *'Yes, I think it depends on what it is. If it was a serious bit of law then the chances are that they would have to look it up as well, so I would possibly just go and look it up straight away and then possibly go and see then and see if it is right. But if it was something like stamp duty or quite a*

recent law like that, because when you start looking at acts and statutes on that you just can't get your head around it so I think it is easier if you go to someone and say "I have been told that we have to charge VAT on this, is this correct?" It is a lot easier to speak to somebody who has done it before' (P109). Trainee 2 suggests that the nature of the task, if perceived as a serious or complex point of law, then she would attempt to look it up herself; suggesting that as a serious piece of law the solicitors are not likely to know the answer and would have to look it up anyway. Having looked it up herself she then suggests that she is likely to go and check with a solicitor that she has the correct information. Trainee 2 is utilising a mixture of resources, published materials and people, however, overall Trainee 2's perception is that 'it is a lot easier to speak to somebody who has done it before'.

4.4.2 Information Seeking: The Librarian as a Resource

4.4.2a 'Despite being considered a useful resource the librarian is perceived as being very busy and as a result can be under utilised. In addition, where the trainees perceive; that they have the ability to find what they need; the time to find what they need; that it is more acceptable or expected that they carry out their own research; an inability to fully express what it is they are looking for; resources to be readily accessible to them; a knowledge of where to look; an urgency of the need for information; that the librarian may or may not know; effort; trust or a need to personally ensure the accuracy of information found, also resulted in the librarian not being utilised as a resource. In contrast, where the trainees perceive themselves as being too busy or that to carry out their own research is perceived as a waste of their time can result in the librarian being utilised more as a resource'.

For example, for Trainee 3 the type of research influences whether Trainee 3 carries out the research herself or passes it to the librarian; claiming to be proficient herself at case research, *'I'm very thorough myself, I can usually find it, if it is a case then I can usually find it. It just depends on how busy I am if I'm not really busy then I will really look for it, and go to the library, and try really*

hard but if I was busy I'd probably send [librarian] an email and say could you find this for me. She just brings it up and sticks it on my desk' (CLP72).

Both Trainee 1 and Trainee 2 praise the librarian as a resource for help but both perceive her to be very busy and this influences their use of this resource.

Influencing factors identified by Trainee 1 are; a perception that the acceptable behaviour is to carry out the research herself; perceived busyness of librarian and access to facilities, Trainee 1- *'Although she always helps when she can, I think it's not always fair to ring up; she has just got so much to do. I think because we have got the facilities that we have we can usually go and find out ourselves unless it is something completely random' (CLP82).* Trainee 1 also perceives it to be easier to undertake her own research as she finds it hard to explain to someone else what she requires, she is not fully able to express what she requires, *'If it some very vague area, it is very difficult to ask somebody that is not a lawyer to do it because you're looking for something quite specific or there is something in your head that you know will really click when you see it and somebody else won't' (CLP83).* This suggests that there is a need for the person with the information need to browse, as only they will know what they want when they see it.

As with Trainee 1, Trainee 2 also perceives the librarian to be very good but very busy and as a result of this perception suggests that it is quicker to undertake the research herself, *'Obviously the librarian is very good but I know that she is very busy and if I need it done then and there then it is just easier and quicker' (CLP97).* Additional shaping factors are; time available, where Trainee 2 now finds herself too busy to carry out her own research preferring to pass it to others, *'whereas in property and especially in commercial litigation, you are more busy' (CLP97);* acceptable behaviour, where she perceives that when she initially started in the seat she was not as busy and therefore expected to undertake her own research, whereas now, in her current situation, being busier, she perceives her supervisors don't mind who carries out the research as long as the answer is found, *'I think they don't know and mind if you are doing it yourself as long as you get the answer. If you have to give it to somebody else to look for it then that is fine and that is what I tend to do' (CLP97);* time, in that she perceives it

potentially to be a waste of her time to carry out her own research, *'just because it tends to be a waste of time'* (CLP97); accessibility, easiness and speed, where if the resource is readily accessible to her she will carry out her own research just because it is easier and quicker if she needs the information there and then, *'unless it is easily accessible and I go oh yeah I know where that is and if I need it done then and there then it is just easier and quicker'* (CLP97); and knowledge, undertaking the research herself when she knows where to go for the information, *'And I do know where to go it is easier to go and look it up myself'* (CLP97).

Whereas Trainee 2 initially suggests that she would pass on most of the research to the librarian unless she knew where to find the solution, Trainee 2 also suggests that passing research to the librarian would depend on whether the case was urgent, in which case she would carry out the research herself. In addition she also intimates that she would carry out the research herself to ensure that the correct information was found, *'I would probably just do it myself to make sure that it was done there and then and that it was definitely the right thing that was found'* (CLP98). This could suggest a lack of trust in the librarian as a resource. However, Wilkinson (2001:258) highlights the professional responsibility of lawyers in undertaking tasks, being part of a self-regulated profession with a public responsibility and as such it is more likely that Trainee 2, in an effort to ensure that the correct information is found, and found quickly, feels the need to trust in her own judgement, to take responsibility for finding the correct information. However, trust in others in relation to finding the correct information is further emphasised by Trainee 2 where she suggests that as she becomes more experienced the carrying out of her own research will be weighted against trust in others, cost effectiveness and efficiency, *'I guess it is not really efficient for me to do it, depending on how quick I had to find it and how much I trusted the person I was asking to do it, to do it properly or to find the bit I was looking for. I mean, the higher up you go, up the chain, it just makes economic sense to delegate it otherwise it's just not cost effective to do it yourself'* (CLP99). Trust is clearly a shaping factor in deciding whether to farm out research or not, however it will also depend on the resources available to Trainee 2 once she is qualified; as a newly qualified she will not necessarily have a

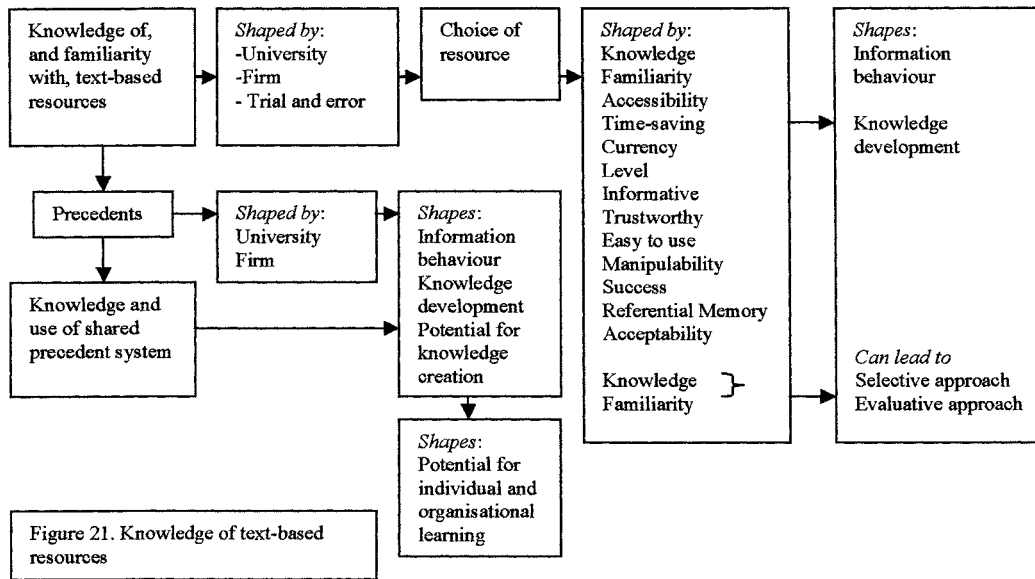
trainee that she can ask to do research and it could simply be a choice between carrying out the research herself or trusting the library (CLP99).

Trainee 4 also highlights the potential for using the librarian but in the context discussed Trainee 4 perceives that the librarian may or may not know. In addition, it would have required effort on Trainee 4's part to find out if she did know, '*I could have probably gone to [name] in the library and she probably could have told me at the beginning but, or maybe not I don't know*' (CLP111).

4.4.3 Information Seeking: Knowledge and Use of Text-based Resources

Leckie Pettigrew and Sylvain (1996) suggest that the individual's perception of the information resource and the information content will impact on the path an individual might take in the information seeking process and identified familiarity, prior success, trustworthiness, timeliness, packaging, cost, quality and perceived accessibility as being linked to this perception. Perception of text-based resources did indeed emerge as shaping the trainees' approach to tasks where similar influential factors were identified in the shape of knowledge, familiarity, accessibility, trustworthiness and success. Further shaping factors also emerged in the shape of time-saved, currency, level of information, referential memory, manipulability and acceptability.

Through an analysis of the trainees' narrations, 'knowledge of resources' and its influence on the trainees' approach to tasks can be characterised in the following ways;



4.4.3a 'Knowledge of and a familiarity with resources and how to search these resources, can be as a result of; time at University; time within the firm; a combination of both firm and University; or through trial and error'.

For example, Trainee 6 notes being aware of the government web resources as these were the ones she used whilst at University, 'I was aware of the government ones cause that's the ones I always used at University as well' (P84), however, although she suggests that she must have known about other resources, 'I mean the other ones, I probably knew that they existed but I, no I have never used them before' (P84), she appears unsure as to whether she really did know of them and it is possible that she came across these more through trial and error, as she does note browsing the Internet to see if there was anything available, 'oh I'll look at that, I'll see if they have got anything on there or something. I don't think anyone had actually referred me to the Internet' (P85), suggesting perhaps that Trainee 6 is supplementing her knowledge of resources from University with those identified through working within the firm.

Trainee 5 demonstrates an awareness of some of the key published precedent resources but is unable to recall whether she learned of these at University or within the firm, 'Yes, (used them at University) or I had used them since I'd been

training in the library, that's the precedent books they use' (P71), suggesting that the two experiences, resources learned of and used at University and those learned of and used within the firm, potentially become blurred into one experiential memory.

Trainee 4 notes that he has had no training on searching the Internet *'I've not had any training' (CLP110)*, and indicates trying different approaches to searching but without always understanding why which does suggest learning by trial and error, *'so I'm typing in key words slash key word slash keyword but today I was in the government site, and I clicked on help for search, don't know why I did it, but it gave you an example of how to do it. I didn't realise that you could type in the whole title' (CLP110)*. This lack of training in search techniques clearly has a negative impact on his success in information seeking and retrieval.

Trainee 3's decision to search the Internet appears to be as a result of her combined experiences from Law School and from within the firm, *'I used it when I was at Law School but I probably didn't know that much about it. We did have a talk on using the internet here actually. [Name] and [Name] went through how to use it. They didn't really say anything that I didn't know before but they made me think more about using it' (CLP35)*. Although Trainee 3 used the Internet at Law School (University or Legal Practice Course) she claims not to know much about it and despite an indication of further training in the use of the Internet by the firm Trainee 3 does not consider learning anything new. This could suggest that Trainee 3 has in fact learned more during her time at University than she realises as she demonstrates some knowledge of Internet resources, and can therefore be said to be bringing to bear her knowledge gained from her prior experiences at University to the current task of finding cases within the firm.

Trainee 2 was guided to resources whilst in the firm, *'I knew about the property one cause when I was in property I was told about it' (CLP92)*, and was also made aware of resources whilst at University as a result of research seminars. The approach taken in the research seminars was found to help Trainee 2 remember how to use the resources, *'Yeah it was probably quite good the way*

they taught it cause at the time you thought this would be quite useful if I had to find it on my own but they did actually make you like go and find an example of this, and you were allowed to work in groups, so it did actually force you to go and open the books rather than just say oh I know it is in there somewhere cause actually when you come to open the books and you realise oh it has got a very strange index or a very strange numbering system it is actually quite handy to have already looked at it before' (CLP93). Unlike Trainee 3, Trainee 2 does not link her knowledge of how to search the resources to her time in the firm but suggests that the firm will assume that trainees will have learned search techniques at University, *'definitely not the firm, I think that they assume having gone to University having gone to law school that you know it'* (CLP96). Despite a memory of being told about some search techniques whilst at University, *'look at what happens when you type in this, you get loads of results, look at what happens when you type in that'* (CLP96), Trainee 2 does not appear to remember explicitly what these were in relation to more specialist databases or perhaps she was never taught these. This is evidenced by her suggested attempt at transferring Google search techniques to subscription databases such as Halsbury's, perhaps suggesting that she is not aware of the differences between the two tools, Google being a search engine and Halsbury's an information retrieval system with differing structures and search tools, *'But I think it is also just familiarity with the software, within Halsbury's it took me ages to figure out that if you put, cause in most searches engines e.g., Google if you want to search I don't know, company and contracts in most search engines you would put companies, contracts but in Halsbury's, or what I have picked up anyway, you it seems to be that you don't really need to bother with the comma as long as you, it took me ages cause it kept coming back with very little responses and I was thinking cause I had the comma and they were actually finding that exact phrase but that's just trial and error and possibly someone but I don't think anyone told me that but'* (CLP96). Judging by Trainee 2's search approach and her apparent unsuccessful search, retrieving only a few responses through the use of a comma, this lack of knowledge and therefore a need to learn through trial and error does influence her success in finding relevant information.

Evidence further suggests that knowing what to do when working on a task can be partially attributed to the trainees' academic legal education. Trainee 2 (CL) attributes her knowledge of the basic procedures of the civil procedure practice rules to her time on the Legal Practice course, *'but you also get introduced to that on the LPC' (CLP90)*. Trainee 1 (P) refers to her files from University, *'I have got sort of my files and things from Uni' (P48)*, and Trainee 2 (P) attributes her knowledge of restrictive covenants and what to look for in deeds to her time at University, *'You get taught it at Law School and at university you learn the theory of it at university, you learn that there are such things as restrictive covenants that will bind the land and any future purchasers, but it was basically at Law School that you see what it would look like' (P51)*.

Knowing what to do when working on a task, although not always explicitly attributed to legal education, instances of seemingly knowing what to do would seem to suggest that prior experience. This prior experience, whether from University, or from their time within the firm, or through a combination of both, has indeed contributed to how the trainees approach tasks and their knowledge development. For example, Trainee 1 (CL) demonstrates her knowledge of the relevant Act, bringing prior knowledge to the task in hand, *'I did know there was an Animals Act' (CLP77)*. Trainee 1 must have learned about the Act from either her time at University or in the firm and has potentially built up her knowledge of the Act as a result of both experiences. Trainee 5, as she takes charge of the file is able to identify at what stage the file is at and what needs to be done next, indicating knowing what to do and must be bringing prior experience to the task, *'I kept the file and knew it had to exchange so what's the position on that, it sort of went on from there rather than it being a case of do this, do this' (P40)*. Trainee 1's (P) ability to recognise when something is not quite correct suggests that prior knowledge and experience is being brought to bear on the task, *'It's like, you read it and you go no I don't like the look of that, there's usually a good reason why you don't like the look of it' (P47)*. Trainee 1 appears to be sensing that something does not look right and this sensing suggests the use of prior experience; experience that enables her to make a judgement. Trainee 1 is using her tacit judgement to guide her. Trainee 2 (CL) was found to acknowledge a combination of education and firm experiences in informing her practice. Her

knowledge of litigation procedures was as a result of the Legal Practice course *'but on the whole, on the LPC legal Practice course that I did two, one and a half years ago you basically ran through the basic format of litigation and what comes after disclosure, documents, witness statements and very much sort of the next step'* (CLP89), and she was found to be using a mixture of that knowledge with knowledge acquired from working with the White Book in the firm with knowledge *'picked up'* through experience of working within the firm, *'even that I've only picked up cause I've been in litigation for a while'* (CLP45).

4.4.3b 'Knowing what is available; a familiarity with what is available and perceiving what is available to be; readily accessible, time-saving, current in content, at an appropriate level, informative, trustworthy, easy to use, able to be manipulated, and successful in retrieving required information, can encourage use in the information seeking process'.

For example, Trainee 3 recounts a change in her use of resources from her time in Property to that of Commercial Litigation, *'I used to use Halsbury's loads and the books in the library when I was in Property and I am hardly ever there any more. I just don't use it'* (CLP68), and suggests accessibility, the location of resources, as the key reason for this change, *'I think mostly because the litigation books are upstairs on the 3rd floor where I am based it's a lot easier than running down stairs constantly'* (CLP68). In addition, Trainee 3 highlights her increased usage of the Internet, and demonstrates an awareness of the resources available to her over the Internet noting the specialist databases of Westlaw and Lexis Nexis, *'and I just do use the Internet a lot more, we've got Lexis Nexis and we've had various things on trial, Westlaw and things like. I've really got into using those'* (CLP68). Trainee 3 is suggesting an increased preference for the use of electronic resources by her statement *'I've really got into using those'* perhaps as a result of an increased 'success' in using these resources, this success in finding what she needs resulting in her returning to these resources in an effort to meet any future information needs. The advantages of using these resources are suggested as being 'time saved' in being able to find the required information from potentially a single resource and the 'currency' of the information found,

'saves so much time and everything is so up-to-date on it – get recent cases and things' (CLP69).

Suggested prior success and a perception that a resource is current were also identified as shaping Trainee 6's choice of resource and the format of that resource, *'I just know that Halsbury's kind of deal with everything, so, and even if they don't answer your specific question, being on the internet you know that they have the update, you know that it is going to be up-to-date or if it is not it says this is about to change or whatever, and it is really easy to access, I mean you can do it from your desk which is really easy' (P79).* Knowing that Halsbury's deals with everything is suggestive of a prior success in using this resource. Further shaping factors are Trainee 6's perception of the resource; a perception that it covers all legal areas and although it might not specifically answer a need, it is informative in relation to the current situation regarding the area of law under research. Furthermore, the resource is perceived as being easily accessible as it is available from the desktop. Her overall perception of the resource leads Trainee 6 to refer to this resource as her first port of call when faced with an area of law that she is unfamiliar, *'I had to, some research; it was in relation to something like agricultural tenancy. I'd never done anything like it before ever, so ehm, I started, I used Halsbury's Laws (P78).*

The perception held of resources was also identified in relation to Trainee 1's choice of resource, *'There's ones I like using and one's I don't, there's a lot that are user friendly and a lot that are a nightmare and again being at University we were encouraged to use them, so I know which ones I like and don't like. We have got more or less the same here so I was using ones that I knew' (P88).*

Preference, knowing which databases she likes and dislikes; suggested user friendliness of the databases, suggesting ease of use and prior success in the searching of these databases; prior experience and therefore familiarity in their use; and accessibility, in that she has access to more or less the same databases that she experienced whilst at University, are identified as shaping factors.

Trainee 1 (P) was also found to be 'amazed' at the amount of information found when using a particular resource and this amazement and thus success from accessing this resource is likely to influence her choice of resource in the future,

'I didn't have a clue, it was one of these things where I, where do you start on this one?' [and] 'you know I punched this into the computer and it gave me a wealth of information, I was just stunned' (P90), perhaps encouraging Trainee 1 to return to this resource in the future.

Perceived ease of use, currency, and manipulability are key factors shaping Trainee 2's (P) preference for the use of the electronic format over the printed format, *'I know there is a book but I very rarely use the book, I find that it is much easier to search on the website. And then it is there, you can print it off, cut and paste it, it's a lot easier I think. And also you know then that it is updated all the time' (P103)*. When faced with a known-item need Trainee 2 whilst in Commercial Litigation demonstrates knowledge of how the library is organised (CLP91). In using the library, shaping factors for Trainee 2 in selecting resources for use are; perception of resource (bibles); resource content (e.g., guidance leaflets); and level of information (aimed at the layperson), *'Because in the library there are sections that's mainly used by the litigation department and section mainly used by property, so I went to the property section of the library and there are sort of bibles as they are called in certain fields so I got to the property registry one and I've currently got it on my desk. So I would start there and then possibly look at the website the land registry web site cause a lot of the time they've got, as do the court, they have sort of aimed at the layperson, help and guidance leaflets and things like that and that's actually quite useful to get the basics and then from there you might think oh alright so they are advising me to do this I'll see what it says in this book or see if there are any cases and hopefully try and pin something down' (CLP91).*

4.4.3c 'Being aware of a key resource does not necessarily result in a referential memory of its existence at a time of need, however, knowing what resources are available combined with familiarity in their use can result in a more selective and evaluative approach to resource use when seeking information'.

For example, Trainee 1 whilst in Commercial Litigation confesses to have forgotten all about the key resource 'The White Book' despite being aware of it from University and suggests that this was as a result of a lack of use, *'At*

University you don't really use it ever and you just forget and I had completely forgotten about this until somebody said go and use the White Book' (CLP75). Continuous direction to the resource, *'I would forget it was there and would be asking silly questions and the answer was 'go and look in the White Book'' (CLP74),* coupled with feelings of, *'oh how silly am I' (CLP75)* instilled a recognition of the need to habitually refer to The White Book, to develop a referential memory of the need to refer to this key resource when undertaking work in Commercial Litigation, *'But once you get into the knack of always referring to the White Book, it's just habit and because you don't do it in any other area, you've constantly got to think right, I'm doing this, check it in the White Book. Once you have got that in your head then you're fine' (CLP75).* Interestingly, despite The White Book being available in both print and electronic formats preference within the seat is for the print version. Kuhlthau and Tama's (2001:32) study, when considering print versus electronic resources, found that 'all eight lawyers interviewed expressed a preference for print texts over computer databases for more complex tasks'. For Trainee 1 however, it is the familiarity gained through using the resource and the need to browse rather than search for a known-item need that helps explain this preference, *'in the book it's dead easy, you can flip to the practice direction but on the internet it's a nightmare because it doesn't all flow and you've got to know what you are looking for, you can't just think I've got this broad area, where do I go but you can with a book. We all tend to use the book, it's the most heavily used book in this firm I think, it's fantastic' (CLP76).* Trainee 1 can be seen to be evaluating the resource in relation to its ease of use and its ability to meet her needs. Preference for the print version by others in the seat might also have contributed to her confirmation of the appropriateness of her choice of format; the print version also being preferred over the electronic version by others.

Despite a preference for the print version in the above example, when it came to searching for case law Trainee 1 was found to be impressed by the electronic resources available to her, *'The advantage is that we've access to wonderful legal subscriptions on the internet, things like Lawtel and Lexis Nexis and things' (CLP77).* Trainee 1 in justifying her impression of these resources demonstrates a knowledge of how to search these databases and their retrieval capabilities,

'They are fantastic because you can put in a selection of words like "horses, trespass on land" or something, ask it to find any articles, cases or statutes in the last ten years that have this in it and then it just brings them all up and you've got to trawl through them and say is this relevant, which takes a lot of time but is a lot less time consuming than if you really had to start trawling through the library for anything' (CLP77). Despite the suggestion that it can be time-consuming to browse through the returned items, their use is perceived as being much quicker than starting to trawl through the library. Trainee 1 is using her experience of using these resources to evaluate the use of the databases against use of the library. Trainee 1's knowledge of the electronic resources is as a result of her time at education where these resources, unlike The White Book, were used, *'we used them all at Uni. We used Lexis Nexis. I actually prefer Butterworths, which I am sure we used at university' (CLP78).* Despite Trainee 1's clear approval of the electronic resources, she does demonstrate a preference, *'I actually prefer Butterworths [and] that's much more comprehensive, it's got everything' (CLP78),* suggesting that she has evaluated these resources in relation to coverage and content. This is further evidenced by her suggestion that the databases are not comprehensive in themselves as she indicates searching three databases, *'I use about three and pull them together' (CLP79),* and her further suggestion that they will miss things, *'And it will miss things and I don't rely on it solely at all but it is a great starting point' (CLP79).* Not relying on them seems to indicate that she has experience of these databases not always providing her with the information required. This experience could be as a result of her time at University and or in the firm, suggesting that the building up of experience in using resources can lead to a more selective and evaluative approach to resource use.

Trainee 2 was also found, as a result of experience, to be implicitly evaluating resources. For example, believing that everything is now available over the Internet, *'just in general now cause everything is on the Internet' (CLP94),* prompts Trainee 2 to try it as a resource, *'just sort of think oh right and put in a search' (CLP94).* However, on reflection as to whether this would be her usual approach to seeking information Trainee 2 suggests that it would not, *'Probably not' (CLP95),* as her experience of searching the web had been that too much

information is retrieved, much of it irrelevant to her needs, *'because I find that searching the web you just get so much, a lot of it is completely irrelevant'* (CLP95). Plus, she does not feel able to trust the information found, *'but I don't tend to, cause you can't be certain of the genuineness of it, you are not quite sure of the source or whatever so I think it is safer to go for ones that have been published by set people'* (CLP95), suggesting that she is indeed evaluating the Internet as a resource as a result of her experience, and as a result of a recognition of the need for authoritative resources as suggested by *'published by set people'* (CLP95). Set people can be interpreted as those whom she recognises as being noted for publishing trustworthy information, for example, the government's *'land registry'* (CLP94) site; as a result of sites that have been recommended to her, and that she has come to trust and use on a regular basis, *'there was quite a lot of land registry, oh they've got a web site and from then so you just search it as you go along. Oh what does it say now and you get to know what is on there'* (CLP94).

4.4.3d 'Knowledge of precedents as a result of education or the firm not only shapes information behaviour but their use enables knowledge development and can enable new knowledge to be created. Furthermore, where use is made of a shared precedent system there is the potential for the individual and the organisation to learn'.

All trainees in Property demonstrate an awareness of precedents. Trainee 5 (P69) and Trainee 2 (P103) make reference to the published precedent resources and Trainee 6 (P76) and Trainee 1 (P97) assume that the firm will have a precedent collection. This is not unusual however, as all trainees will have come across precedents at University and on the Legal Practice Course. Plus they will be aware that all firms will use precedents routinely within their work. Although they could all be expected to be aware of the key precedent resource 'The Encyclopaedia of Forms and Precedents', (although Trainee 1 does not indicate this resources in her narration), what they would not necessarily be expected to immediately know are which firm precedents are to be used for which specific task.

Knowledge as regards the content of the precedent system varies between trainees, for example Trainee 1, although assuming that the firm will have a precedent bank, when asked how she would go about identifying a precedent for use, appears to be not so confident, *'fortunately, well, I can't remember, we do have precedents on the computer and they are very, well they are easy enough to find but the added advantage is if somebody says that most of the time what happens is if they say look, I've got one sitting in my directory on the computer'* (P99). Despite being aware of the precedent bank, knowing which precedent to use is made easier when directed to an appropriate precedent sitting on a solicitor's file. Trainee 1's narration is also suggestive of a lack of use of the precedent bank, usually being directed to the solicitor's personal store of precedents to be used. Trainee 6 also indicates not using the precedent bank, *'Ehm I assumed there would be a precedent bank but I haven't actually used it'* (P76), and as with Trainee 1, indicates using a solicitor's personal collection of precedents, *'actually it's, my supervisor has precedents and so I get precedents of his'* (P76). Trainee 2 (P), possibly because of her experience within the firm, not only identifies precedents as a resource, *'There are a few websites that the firm subscribes to that have precedents on them and there is also the Encyclopaedia of Forms and Precedents, I think that's a Halsbury's programme'* (P103), but describes their use as a resource and their value to the firm, *'It is obviously safer for the firm if there is a precedent because then they know everybody is using the same and it has been tried and tested and people have thought a clause doesn't work and jugged it around. Obviously you do have to do some form of re-jigging but it is mainly based on precedents and if there is a clause in there that you have to take out and put a new one in then you try and find a precedent that is sort of what you want and re-jig that rather than starting from scratch'* (P102). Through this description it can be posited that the precedent bank can be thought of as an example of an organisational learning system as it enables the development of organisational knowledge. Individuals can access and learn from work that has been previously used and created by solicitors within the firm. They can manipulate that work to suit their individual task needs, ultimately adding any new, manipulated precedent versions to the precedent bank for future learning, use and adaptation by others in the firm. Importantly it also reduces the need for duplication of effort, thereby saving time

and effort. However, for it to be an organisational learning system, it has to be used and added to by all in the firm. As discussed above this is not necessarily the case with both Trainee 1 and Trainee 6 not using the precedent bank. However, although Trainee 1 (P) does not refer to using the central precedent system, her account of the use of a solicitor's precedent collection, provides further evidence of their potential for shared learning, *'I've got one sitting in my directory on the computer, go into it, get it, change it round and give it to me to approve it which makes a lot more sense. So you know where you are and then it's sitting on your computer' (P98), [and] 'you learn a lot more by going through one that's alright and saying I'll just tweak this little bit to make it that, you learn a lot more that way than sitting for three hours copying of some precedent book that is in the library' (P99)*. Through Trainee 1 (P) accessing a solicitor's precedents, the working on that precedent to meet the needs of the matter, and the approval of the worked precedent by the solicitor, there is a potential for learning from the original precedent itself, and from the approval of the re-drafted precedent by the solicitor. In addition, the resultant approved precedent sits with the trainee in addition to the solicitor, for future reference, use, and adaptation by both parties, and others they might refer their precedent to in the future.

A similar situation was identified in relation to Trainee 4, who through working on a task for one of the solicitors, created a new precedent to meet the needs of the task in hand, *'I created my own one' (CLP151)*. This generation of new knowledge has the potential of being used again by Trainee 4, where he comes across a similar task in the future, but unless it is stored on the firm's precedent system for the potential use by all, its future use will be reliant upon memory of its existence. Like Trainee 1's precedent, Trainee 4's will also be stored on the solicitor's file, for which Trainee 4 carried out the work, for future reference, use and adaptation by both parties, and others they might refer their precedent to. However the future use of the two precedents could also be reliant upon the memory of the solicitor or the trainee to make reference to it in the future, or the uniqueness of the file which might spark off a memory of the file and its therefore future use.

4.4.3e *'Perceived acceptability of spending time browsing resources shapes a trainee's information behaviour and knowledge development'*

'Acceptability' of time spent on browsing resources in the library was found to influence the trainees' approach to tasks. Both Trainee 4 and Trainee 1 suggest 'time' as a shaping factor. For Trainee 4, to spend time browsing for the information needed is suggested as time wasted, *'First port of call would normally be the library, look through a couple of just general books to do with the area of the law. I wouldn't spend too long on that cause you could spend a long time and its not going to get you anywhere, so normally if I don't think that it is getting anywhere I will, if there is a chance, go back and speak to the person'* (CLP49). Trainee 1 perceives that there is insufficient time available to spend it browsing resources in the library to find the information required, *'Well we have got a good library here so you can find out but time is not on your side usually (laughs) and you cannot be sitting in the library for an hour'* (P48). Both trainees as a result of this perception, having spent what they perceive as an acceptable amount of time browsing, opt for a differing approach. Trainee 4 opts, where possible, to go back and seek further guidance by asking (CLP49). Trainee 1 consults her files from University, or seeks further guidance by asking (P48). This perception of acceptability, of being seen spending time in the library is an interesting one, and is perhaps indicative of the culture of the firm, where time is of the essence in the work of solicitors due to their billing procedures. Culture is said to represent the behaviour patterns or style of an organisation (Wilson, 2001:355), and as time is of the essence in the work of solicitors due to their billing procedures, this perception that spending too much time on research or in the library is inappropriate, is perhaps related to efficiency and effectiveness, that too much time spent in the library is viewed as not working efficiently and effectively.

From the above a rich description of the trainees' behaviour in approaching tasks emerges and how this behaviour shapes their knowledge development or learning and potentially their future information behaviour. In addition, a clearer picture of how information and knowledge are used and transferred is also beginning to emerge. For example, guidance through direction on the task involves the

transfer of information and know-how. Guidance in the form of feedback involves the transfer of knowledge in that the solicitor's knowledge, of how things are done or should be done, is transferred to the trainee in the form of verbal or written information. Guidance in the form of the case files and published resources involves the use of information and the transfer of knowledge, in that the files and published resources contain information which is interpreted by the trainee, suggesting the bringing of knowledge to the use of these resources, in interpreting and understanding the information found in these resources. How the trainees process, use, and transfer information and knowledge is explored further in the following section.

4.5 Information Processing and Use

How is information processed and used?

Outcomes in Leckie, Pettigrew and Sylvain's (1996) model are the results of the information seeking process with the optimum outcome being given as the information need being met and the professional accomplishing the task in hand. This research provides evidence of outcomes in the form of the use made of the information gathered during the task, and that presented in accomplishing the task.

Through an analysis of the trainees' narrations information processing and use can be characterised in the following ways;

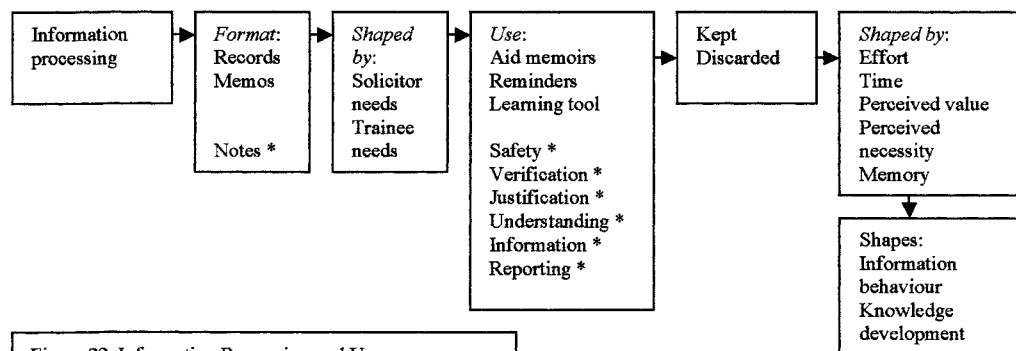


Figure 22. Information Processing and Use

4.5a 'Whether stored electronically or in a personal file, copies of memos or records of tasks undertaken can be used as future points of reference, as aid memoirs when faced with similar tasks; as reminders of how to approach a task; and as a learning tool. However, keeping copies of memos or records can be dependent upon effort, time, and a perceived necessity'.

4.5b 'Procedural notes on tasks however, are often made for the more immediate reasons of; safety; verification; justification; understanding; information; and reporting, and are not necessarily kept or referred back to after a task has been completed where there is a preference to rely on a memory of worked files'.

All trainees within the Property and Commercial Litigation seats were found to keep a copy of examples of the work that they have been involved in and, or, to keep procedural notes on what they have been doing, but the reasoning behind this was found to vary. For example Trainee 2 whilst in Commercial Litigation does not suggest keeping a record of all the tasks that she has been involved in, *'I possibly should do but I don't' (CLP61)*, and suggests that this is as a result of; the time and effort required to write up what she has been involved in; perceived value, she perceives it as potentially valuable but, importantly, not vital; perceived necessity, the computer is seen as the solution as all her previous work is stored there; and a belief that she will be able to find the relevant material again *(CLP61)*. She does suggest however that she will take notes, *'I just want everything down, whatever they tell me I write it down'*. Shaping factors in Trainee 2's context are; safety to protect herself and safety in being able to verify what she has been asked to do if approached; understanding, a belief that even if she does not understand what they are asking her to do, by writing everything down she is hoping that on reading her notes alongside the file she will understand *(CLP59)*.

Whilst in Property, Trainee 2 also emphasises the need to take notes, *'I do tend to take notes and telephone notes and things just to have something on a file so you have got a record of what was said at whatever time' (P64)*, but gives the main reasons as being to ensure that there is a record of what has been said, and

for information, in case someone else wants to establish what has been going on in the file (P65). For Trainee 5, notes are kept in the event of being asked to report back or to justify the approach taken, *'also if somebody comes back and says when did you contact them, it will be all there and I can say there and then I said that and I did do that'* (P52). Trainee 4 mentions the procedural notes he makes whilst carrying out research, *'I might have written down, looked in this book. I might have listed books, or if I've been on the Internet I might have noted that I have looked at the Government site and I've looked in the Law Society Site and I would tick them off so that I know where I've looked. So I will do that in my own notes'* (CLP65), however these procedural notes on tasks are not kept, *'but they go in the bin'* (CLP65). This is perhaps not surprising, as the resource or resources that were found to contain the solution or information required will be noted in the final memo prepared for the solicitor as discussed below.

In contrast to Trainee 4, Trainee 1 does suggest the keeping of procedural notes, for example, whilst in Commercial Litigation she indicates the need to keep track of work undertaken by diarising all activities, *'So you do get into the way of keeping track, of diarising everything'* (CLP58), and whilst in Property indicates making a record of her research activities, *'because I was at University you do have to do research for your LPC and you have to write down instruction as to what you did, how you did it, when you did it which book so fortunately I was used to that'* (P62). However, it is not clear whether she will only refer back to the notes or research activity records for the duration of the task or whether she will refer to them in the future if faced with a similar task. However, she does indicate referring back to her notes from University, *'I actually kept them so I had them as reference for the basics'* (CLP56), [and] *'I have got sort of my files and things from Uni'* (P63), suggesting that she does make use of recorded past experiences as aid memoirs.

Other trainees were found to keep more than notes but records in the form of copies of examples of work that they have undertaken, or copies of memos prepared for those for whom they have undertaken work. For example, Trainee 3 keeps copies of examples of the work that she has done (CLP51). Shaping factors were linked to the value she placed on the need to keep records and included;

learning to make less mistakes through the use of a previous example; reliance on memory in relation to the ability to remember facts, the more tasks undertaken the more likely she will forget on which file they are; trust in her own work rather than on that of others; less duplication of effort, not having to start from scratch each time; and the accessibility of existing examples due to the sheer number of available files (CLP51). However, despite placing a value on the need to maintain and use records from tasks undertaken, the further shaping factors of time and effort were found to influence Trainee 3's ability to organise her material in order to be able to retrieve the required information in the future, '*I'm going to have to organise myself to do that but god knows when I'm going to find the time*' (CLP51). Trainee 3 also indicates the need to organise her records so that she can retrieve and by implication, refer back to them in the future, '*So I'm going to have to go through it and really label everything so that I can find it*' (CLP51).

Trainee 4 keeps copies of work that he has undertaken in a file, '*I keep a file, a paper file. I've got a litigation research and precedents file which is just my own so where I've been asked to do something ... I've taken an example of that, what I've done for that specific case and stuck into the file and whenever I've done any research I've put a copy of the memo in this file*' (CLP63), and implies he would not simply rely on his memory but refer back to these memos if faced with a similar task in the future, '*Yes, ehm, yes, [rely on memory] but quite often in your memos if you have gotten the point of law ...*' (CLP66, CLP67). These memos will provide him with a copy of the solution and a note of the resource used to find the solution to the task query. From Trainee 4's narration, '*the partner or fee-earner who is asking you to do it wants a memo back, to them from me, the subject, research on or whatever, answer, most of them like it set out quite neatly and bullet points, not pages and pages cause they don't want to read that*' (CLP65), it is clear that the needs of the person for whom the trainee is undertaking the task will influence how the information found is processed, used, and transferred. There is an acceptable amount and format of information that the solicitor will expect back from the trainee and it is this format that trainees will work towards when undertaking the task. It is also this format that will be kept, if kept at all, as it provides the answer. Trainee 4 also keeps a copy of memos for

himself. Shaping factors in Trainee 4's case are; perceiving it to be acceptable behaviour, having a perception that all trainees will do this, so it is a usual thing to do; their value for future reference; and a difficulty in identifying what others have stored on the internal network and therefore a need for one's own record (CLP63).

For Trainee 6, in addition to seeing her records as potentially being of use for future reference, as an indicator of where to start on a task, *'I think the main reason is in case I come across something in the future, oh I did a bit of research on that once, I'll look at that. And then even if it is say three years later and it is out of date it gives you your initial starting point and the background cause the likelihood is that it won't be changed that much really'* (P59), there is also the potential for certain records to be used as an aid as to *how* to approach the task in the future, for example, as a result of changes and comments made by a supervisor, *'It's quite useful, cause although that I did quite a lot of work on it my supervisor obviously made quite a lot of changes and things, it was good cause he explained why he was making changes and things and that's been a really useful source'* (P58).

The trainees can potentially use their records and notes on their approach to tasks as a tool for reflection and learning. By maintaining and re-visiting a record of what happened, who said what, any solution, they can reinforce their learning of procedures and any points raised as a result of the tasks undertaken. In addition, comments and changes made by the supervisor, as in the case of Trainee 6, will also act as a learning aide, as to how best to approach similar tasks in the future. However, for learning and reflection to take place requires that these notes are used. This, as it turns out, is not always the case, with a reliance on a memory of having undertaken similar tasks on previous files being identified as guiding their future behaviour. For example, Trainee 2 whilst in Commercial Litigation, as a result of her limited time to-date in that seat, can rely on her memory to recall files on which she has previously carried out similar tasks; *'I tend to just try and think which client it was for cause I still have it under client names, I think it was them, trial and error, I think you can do that but at the moment I don't need to I haven't been here that long so it is not a question of forgetting that much'*

(CLP62). Trainee 5 (P54) suggests that she would make new notes on what she can '*recall from memory*' and makes reference to the file itself but not to the notes that she recorded at the time. This could suggest that she no longer has her notes, or perhaps does not see them as being of relevance in the future, but only of relevance to that situation at that time, to help her master the task at that time. However, in the 'here and now', Trainee 5's indicated reliance on her memory, as evidenced by the example of her recollection of drafting a letter, '*I've had to draft a letter before I might remember oh yes I remember that file had a letter similar in it so I can go into the cabinet and get the file out*', is bringing to bear her experiential knowledge, her memory of having carried out something similar on a previous file. This learning from experience is further suggested by Trainee 5's perception that '*a lot of it seems is just what people have learnt over the years*'. However, it is clear from Trainee 5's narration, that where her experiential knowledge is not sufficient she would also seek out further information in the form of books and files, to help her '*fill the gaps*'. Trainee 6 also refers to her memory of work carried out on previous files, '*oh I did some research on that for another file, so we had a look*', and also suggests that as she grows in experience she expects to rely more on her memory of work carried out on previous files, implying less use of notes (P61).

4.6 Information and Knowledge Sharing

How is information and knowledge shared?

4.6.1 Interaction

Information exchange is where one seeks information from another person (Wilson 1981:4). This research provides evidence of how interaction can lead to more than the exchange of information but of the development of know-how.

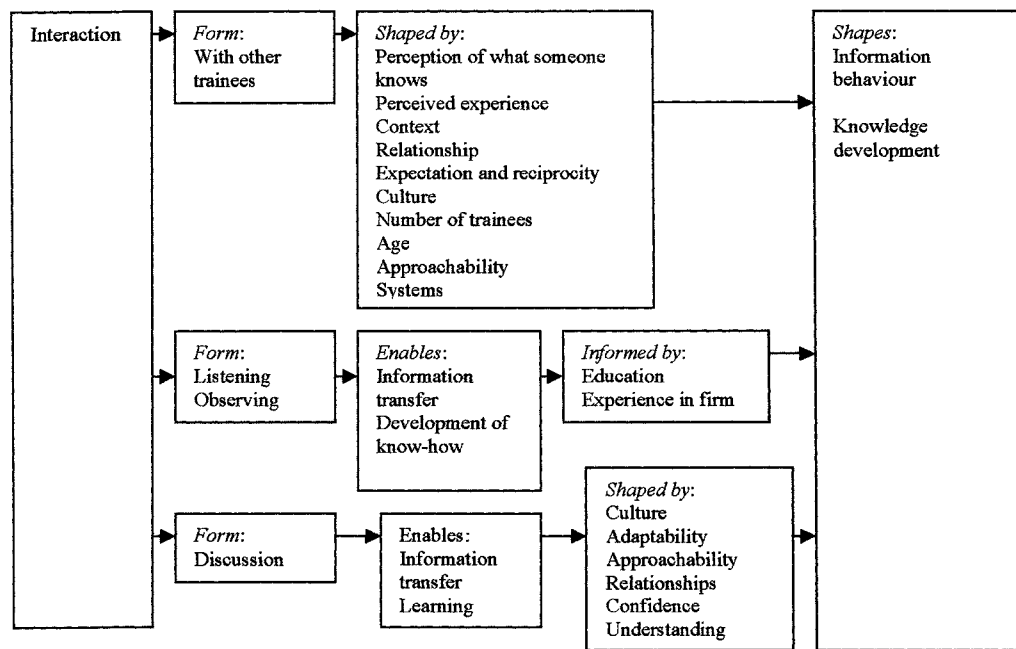


Figure 23. Information and knowledge transfer

4.6.1a 'Interaction with other trainees enables information sharing and thereby knowledge development but can be dependent upon; a perception of what someone knows; their perceived experience; the context, that is their experience of the seat; the relationship with those from whom one seeks information; expectation and reciprocity; culture; number of trainees; age; approachability; and systems that enable sharing'.

For example, experience was identified as a shaping factor in relation to Trainee 3 and Trainee 2, but for differing reasons. Trainee 3 uses a trainee whom she perceives has more experience, as she has been in the seat for three months longer than her, *'So [name] has been in litigation 3 months longer than me cause I've been in employment, so a lot of the time I've gone and asked her'* (CLP114). In contrast, Trainee 2 perceives that the other trainees might not have as much experience as her and as a result does not refer to the trainees in the context of her work in litigation, *'but she is in the same boat as me and possibly not as experienced'* (CLP138). Experience, along with a 'perception of what someone knows', and the 'context' of the work, were found to shape Trainee 2's information seeking behaviour whilst working in commercial litigation. Trainee 2 feels that it is safer to seek help from someone whom she perceives knows

more than her, who has definitely carried out that type of work before, and who is also familiar not only with the context of the work, but with the needs of the solicitor for whom the work is for, *'I felt safer going to somebody who had definitely done it before and definitely knew the correct way of doing it [and] I knew that the person I approached had done lots and lots of work for the head of department so I knew that she would know how he likes it done'* (CLP138).

Where she has no experience of the seat, then the trainees with whom she has a good relationship, and who have experience of the seat in question, are then seen as useful resources, as it *'makes sense to share information'* (CLP139).

Context is also a shaping factor in relation to Trainee 4, who suggests that there are likely to be other trainees in the seat who will have carried out similar work, and who are therefore familiar with the context of the work, and therefore useful as resources, *quite 'often there are at least three trainees in each department, quite often they have done the same point of research'* (CLP149). Expectation and reciprocity are further shaping factors suggested in relation to Trainee 4, who feels that as he is willing to provide examples of his work to other trainees then the other trainees will also be willing to do this for him (CLP149). This use of other trainees could suggest that there is a culture of sharing amongst trainees. Trainee 4's account, *'Cause your first port of call, when I was there, was the other trainees in litigation and then it was the person who was in that seat before and then it would be other trainees'* (CLP150), suggests that use would be made of trainees, to aid learning, wherever they sit, but especially where new to their respective seats.

Where there were other trainees in the seat, Trainee 5 also felt that sharing and learning from each other was a common occurrence, *'Yes, I would say that we do that quite a bit, that happens quite a lot, cause in the department I am in there are three of us in it, one of the girls in her 2nd year, oh maybe she knows quite a bit more and she'd been left a bit by the girl who was in her seat previously. So I think it does happen quite a lot, how do you do this? Also there's some younger people in the firm who are quite approachable as well, so you can go to them – how do you do this? etc, do you have a minute rather than go to your partner'* (P110). Here a range of potentially shaping factors can be identified including;

the number of trainees in the seat; time served, in that a trainee in her second year, who had also been left information by a previous trainee in the seat, was perceived as potentially *knowing* more; ‘younger’ and ‘approachability’ are linked together in the perception of which person one could go to for help and is perhaps indicative of a feeling of identity with one’s peer group.

This sharing culture amongst trainees is further evidenced by Trainee 3 who highlights ‘*trainee discussion meetings*’ (CLP116) where the trainees are asked to take note of the experiences they have within each seat, to be shared amongst the other trainees. Through a system that enables the sharing of what one has worked on in a seat enables the trainee to take more control over their own learning, now having an indication of what they should have learned in a particular seat. Furthermore, fear of not having experience of a task is suggested as a shaping factor in this need to share what each other has been doing, ‘*Because it is such a worrying thought that you think you are not getting proper training. Cause you know you are going to qualify and someone is going to say, and you say, I haven’t done it, and that’s more scary than anything else really*’ (CLP116). By documenting and sharing the form of work undertaken by trainees, the firm can be said to be starting to embed this knowledge into the organisation’s memory. From this point on there should be a record for all trainees to check as to what tasks they should have undertaken, and therefore, learned from, within each seat thus ensuring that all trainees are enabled a similar and more holistic learning experience.

4.6.1b ‘Interaction in the form of listening and observing can lead to more than the transference of information but the enabling of learning and the development of know-how, however this learning and the development of know-how is not necessarily as a result of interaction alone but can be informed by time spent in education and further developed through practice within the workplace’.

Trainee 2, Trainee 3, and Trainee 1’s accounts indicate the acquisition of know-how through sharing the same space as their supervisor or the solicitors with whom they work. Trainee 2 suggests that she can tell when the solicitor is busy or not, or concentrating on something, ‘*you can tell when they are busy or when*

they have stopped being busy or when they are concentrating' (CLP140), and this suggests that she is using her intuition, knowledge gained as a result of her experiences of sharing a room with her supervisor. In addition, through listening to and observing her supervisor, whilst situated in the same room, Trainee 2 is developing skills and knowledge in how to act with, for example, clients and secretaries, *'cause he is on the phone a lot so you realise how he interacts with some clients, how he interacts with others, how he delegates to secretaries, just things, yes I guess you just learn all the time, you watch and learn and think oh yeah'* (CLP133). As these skills are not learned through being expressed by the supervisor as 'this is the way you should behave' but learned through observation and hearing, then Trainee 2 can be said to be developing her own tacit knowledge of how to act in certain situations.

Trainee 3, despite being taught about interviewing whilst on the legal practice course at University; *'The interview, we get taught at law school how to interview people but I wouldn't say we did any of that here. You don't do silly interview plan thing'* (CLP120), feels that this has not contributed to her learning in interview techniques but identifies her acquired know-how as developing through listening, observing and practice, *'I've been to a lot of meetings now with partners and newly qualified which is probably better, they are more down to earth and tell you how to do it. And you just see how they do it and then you go into the deep end, this partner will say go and interview this person so you just do'* (CLP120). This suggests that she has learned by sitting in with the solicitors on interviews, however it is perhaps more likely that she is using a mixture of both her learning from Law School and from her involvement in interviewing itself. Trainee 3 is likely to be using know-how (what she learned about interviewing at Law School but is unable to express except in the form of the interview plan), her know-how gained by listening and observing interviews and the actual carrying out of interviews, and information, what has been shared by the other solicitors. Trainee 3, as learner, is developing her own tacit and explicit knowledge of interviewing by becoming involved in the practice of interviewing.

Trainee 1 also suggests learning how to handle situations with clients by observing and listening to her supervisor but emphasises that there is no better way to learn than by doing, *'Where I am now, sharing an office, I can hear [supervisor] on the telephone, you do have the ability to switch off, but you do hear and you hear how she handles it, you can guess what is coming down the phone by the responses, I know her well enough. You can learn that way but you can't beat actually sitting there on the phone or in front of somebody and having to deal with it'* (CLP126). Trainee 1, as with Trainee 3 also suggests that she has developed her know-how of interviewing by becoming involved in the practice of interviewing, *'You've got to be able to judge your clients and what the response coming back to you is [and] So I have had the advantage there [in property] of having six months of having to deal with highly stressed clients moving house so that was an advantage'* (CLP127). However, this practice will also have been informed, although not necessarily recognised as such, by her experiences at University, where she was introduced to behaviour when working with clients, *'Obviously they [University] say things like if the client is hurling abuse at you or you are in a room like this and you're thinking "I don't like the look of him, he is being a bit strange" then they say just leave the room and get somebody to sit in with you or tell him to leave if he is getting aggressive'* (CLP129). Clearly Trainee 1 has learned about what one should do in certain situations, but this is seen by Trainee 1 to be more common sense than learning, *'It is more common sense than anything else; you don't get training in that sense'* (CLP129). However, it begs the question if she had not been taught that one can leave a client that one perceives to be a bit strange, would she have thought that this was acceptable behaviour in practice? Trainee 1 is therefore potentially bringing to bear both experiences to the situation, those acquired from University with those she has acquired within the workplace. In contrast, when faced with a different task, despite initial feelings of forgetting what she studied at University, *'I had done litigation at university in my second or third year so I had had at least two years break. It is very structured and very timetabled and if you haven't done that in over two years you are thinking what happens next?'* (CLP124), Trainee 1 can be seen to be bringing her learning from University to her current situation in commercial litigation, *'But you do have that once you settle back into it and start doing it, you are looking at a form and think oh yes, I've seen this*

before, I know what this is for' [and] 'You do have the broad basics which is quite handy. You don't realise you do until somebody hands you a bit of paper and says to do something with that and you think oh I know what to do with that' (CLP124). Trainee 1 does not realise what she knows until faced with the task itself, where she recognises what needs to be done. This suggests that Trainee 1 is bringing to bear, at that point in time, a memory of her past experiences, a memory that she didn't know she had until faced with the task.

4.6.1c 'Interaction in the form of discussion can lead to more than the transference of information but the enabling of learning, however, for discussion to enable learning can be dependent upon the culture of the seat, being able to adapt to the culture of the seat, approachability, relationships, confidence and understanding'.

Discussion between the trainees and solicitors in relation to the tasks they are undertaking enables the sharing of information and therefore increases the potential for knowledge development. Shaping factors include culture, situation, approachability, relationship, confidence and understanding. For example, Trainee 3 identifies the department as a whole as being 'chatty', *'it is a chatty thing, whatever you are doing people chat about their work a lot to make sure that they are doing it right, to get a different opinion, to get a 2nd idea or something, that's what it is all about' (CLP121)*, suggesting that it is usual for staff in the department to discuss their work, to share opinions, and therefore there is the potential for the trainee and other members of the department to be continually learning. This usualness is suggestive of the culture of the seat, to encourage discussion and thereby increase the potential for learning. However, the culture of the department, to chat about work, was found to be an initial barrier to Trainee 3's ability to complete her own work, *'I think that it has been good for me in that you have to learn to work with interruptions and to then get back to it. I think I was probably bit bad at that before, I didn't like to be interrupted' (CLP121)*, resulting in a need to adapt to the cultural chattiness of the seat, her initial preference being to work uninterrupted.

The chatty culture of the department is further evidenced by Trainee 1 and Trainee 2's situation, sitting with their respective supervisors. For Trainee 1, despite an initial concern at being placed in the same room as her supervisor (CLP18), Trainee 1 discovers the value of having ready access to her supervisor, where through the chatting and discussion of both her supervisor's and her own work, learning was enabled, *'And it's just really useful, you learn so much. You don't realise you do, you're just sitting having a bit of a chat. It is very, very useful, but a bit daunting to start with'* (CLP123). Trainee 2 also acknowledges learning as a result of sitting with her supervisor, *'it helps me cause I can realise that's what he would do in that situation, so you learn from that as well so it's quite good'* (CLP140), claiming to get on well with her supervisor, making it easy to chat and ask questions, further suggesting approachability and relationship as shaping factors, *'I would tend to ask the partner that I sat with cause I get on quite well with him and he is quite chatty and we chat quite a lot and what's quite good about the partner'* (CLP140).

However, the potential for discussion did not always result in such feelings of helpfulness or usefulness, for example, for Trainee 4, discussion was identified as taking place at the time of instruction, *'if she has something that is quite urgent she would come in my room and say can we have a quick chat, go and chat to her'* (CLP145) where Trainee 4, on hearing what was required could ask follow-up questions; to discuss what is required. However, this did not always happen and was dependent upon Trainee 4 being able to understand what was required, *'I didn't grasp the actual thing what she was asking me to do in that case'* (CLP146). As Trainee 4 does not understand what he was being asked to do he is perhaps unable to ask questions at the beginning because he does not have the knowledge to be able to ask appropriate questions. It is perhaps also indicative of a lack of confidence on Trainee 4's part, to admit that he did not understand, at the time of instruction, what he was being asked to do.

Discussion also suggests a two way process, for example, through discussion Trainee 1 is learning from the experience of her supervisor, there is however also a suggestion that it is not purely one way, but that the supervisor also has the potential to learn from Trainee 1, *'It is a discussion. I will put my views forward'*

(CLP122). This also suggests that both Trainee 1 and the solicitor are using a shared language, in addition to bringing to bear their past experience and knowledge of the task, in order to be able to explain [solicitor] and to understand and learn [Trainee 1]. In Trainee 2's case, discussion of the tactics involved in a case suggests more than listening on the part of the trainee but of involvement, *'we'll discuss the tactics involved and what the next step will be'* (CLP140). However, to what extent there is involvement, that is, contributions from the trainee, is difficult to ascertain as Trainee 2 also suggests that the solicitor is clarifying the situation in his own mind, through talking about the case, which does not necessarily suggest a discussion per se between the two, *'cause it helps him, he can talk about it and it helps him sort of formalise it in his mind and it helps me cause I can realise that's what he would do in that situation'* (CLP140).

4.7 Is Learning Transferable from Seat to Seat?

4.7.1 *'Changing seats of training can feel like starting a new job; where one does not know anyone; how to do things; or how things should be done, but an increased confidence as a result of time spent in the firm can more quickly enable the trainees to adapt to new conditions'*.

4.7.2 *'Dealing with clients and colleagues was felt to be transferable across seats, but legal knowledge gained in one area is not necessarily seen as transferable to another and is potentially context bound'*

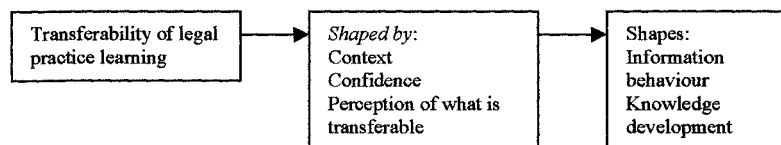


Figure 24. Transferability of learning from seat to seat

On reflecting on their experiences within their seats Trainee 1 notes *'departmentally they are worlds apart'* (CLP131) but agrees with most trainees that what is transferable is dealing with clients and colleagues, *'dealing with clients, dealing with colleagues'* (CLP131). Trainee 3 was the only trainee

identified as suggesting that potentially nothing was transferable. *Trainee 3 – ‘I think that they [seats] are really different’ (CLP117)*. This is perhaps explained by considering the thoughts of the trainees on changing seats.

Trainee 1 and Trainee 3 note how changing seats can be difficult. For example, for Trainee 1, *‘It’s always difficult because when you swap seats then you’re back to square one almost and you don’t know anybody in the department, you don’t know how they do things, you don’t know how their files work and you do feel stupid all over again’* and (CLP131). For Trainee 3, *‘I thought that, every time I begin a seat I’ve been given something and I’ve thought, absolutely no idea where to look, where to start, who to ask and you get it on your desk and you think ‘Oh my God’, and its scary, its like being in a new job and you don’t know anyone. You don’t know the person that’s given you it, you don’t know how lenient they are, what they expect back from you or anything’* (CLP117).

This would suggest that what was learned in one seat is not transferable to another. However, the trainees suggest that it is as a result of an increased confidence that they are more able to adapt to the new conditions of differing seats. For example, *Trainee 1 – ‘But that feeling goes more quickly than it did in the beginning and you are to the point where you are quite happy to go to your supervisor and go “help”. Whereas before you always felt that you would try first and make a complete mess of it and then look even worse’* (CLP131). *Trainee 2 – ‘You just get on with it, and then you do, the courage to go and ask them’ excuse me I’m stuck’* (CLP117). The trainees have learned that it is okay to approach colleagues for help and would appear to be more confident in doing so.

Trainee 4 also identified an increased confidence in approaching others, particularly colleagues, as a result of time spent in the firm, *just being more confident within [the firm] as well, to phone up the IT people if you have a problem with your computer or go and ask a secretary to do something. Back in litigation for the first three months I would use the secretaries first if there was a problem with the computer, I would go to them first and ask if they could sort it out, could they phone them for me, can you phone accounts for me cause I don’t understand this whereas now I have to do it myself and I don’t mind that though*

cause I'm better at it now' (CLP153). He also highlights his own confidence in his own ability as a result of time spent in the firm, *'But in this department I was given a file and told ask them this and take instructions, and I did that no problem whereas 6 months ago I wouldn't have done that. So general stuff like that is transferable' (CLP153).* Taking instruction from clients is likely to be a skill required in all seats as the work of law firms is client based, and it would appear that Trainee 4, as a result of time spent within the firm, is more confident at being able to transfer this learned skill.

Trainee 2 was the only trainee that specifically mentioned transferring elements of her legal learning from one practice area to another. For example, in relation to a boundary dispute task within Commercial Litigation, she notes the bringing of what she had learned from Property to the task. *'the seat that I had done prior to the commercial litigation seat was the property seat so in terms of understanding the property documents in a file that was terminology that I had a lots of experience about so I knew what to look for in the title deeds and yeah you know what you are looking for so I suppose in that sense if I hadn't done property I probably would have been a bit struggling with that kind of thing' (CLP135).*

When transferring to a new seat, fear and the building up of courage to ask, are identified as having an influence on the trainees, and can be linked to reciprocity as discussed by Wilson (1981:4), where the trainee does not want to reveal their ignorance to a superior and could therefore have some influence on the trainees' ability to learn effectively. However, an increased familiarity with the process of changing seats is suggested as influencing the trainees' confidence, enabling them to more quickly feel able to adapt to the new seat and to approach others for help. In addition, through an increased familiarity with procedures, the trainees also gain confidence in being able to deal with colleagues themselves.

Interestingly, only one trainee notes the potential transference of the legal knowledge acquired from one seat to another. If we consider this with Trainee 1 and Trainee 3's comments where the suggestion is that that two seats are different, and that as trainees they appear to be starting all over again, this could suggest that the legal knowledge acquired in one seat is context bound. Stein

(1998:1) suggests 'that knowledge is acquired situationally and transfers only to similar situations'. However, it could also be as a result of not having [to-date] come across a situation where legal practice in one area is potentially transferable to another, where the context of the task has some background similarity as in the case of Trainee 2.

Whether the knowledge acquired is context bound, or whether it is a case of not having yet come across a situation that requires a referential memory of a previous practice area, the information and knowledge behaviour processes outlined in this whole section will start all over again. The trainees will be faced with potentially differing sets of needs, based on the differences in legal practice tasks; they will potentially learn about and use a differing set of resources; they will potentially use, process, add, and transfer differing information and know-how to and from their individual knowledge banks. Throughout this process they will not only be adding to their knowledge, but building up their experiential know-how of legal practice, and as a result of this and their prior experiences, will have developed an increased confidence of practice. And, linked to 4.2.3.2 above, will be increasingly better equipped to tackle tasks, familiar and unfamiliar.

4.8 Collated Diagram of the Information and Knowledge Behaviour of Trainee Solicitors

Each of the diagrams used above to support the presentation of the characterisations of the trainees' behaviour has been collated below to provide a detailed picture of that behaviour. The diagram covers three pages with the first page setting out the task environment; the second page, the approach to tasks and knowledge of and use of resources; and the third page, information and knowledge transfer. However, none of these sections should be considered in isolation of each other but as inter-related. This is denoted by the use of arrows along the top of each page of the model. In addition, where there is a more explicit link between one area and another, these links have been highlighted by the use of dashed text boxes.

Section 4.8 Collated diagram of the information behaviour of trainee solicitors

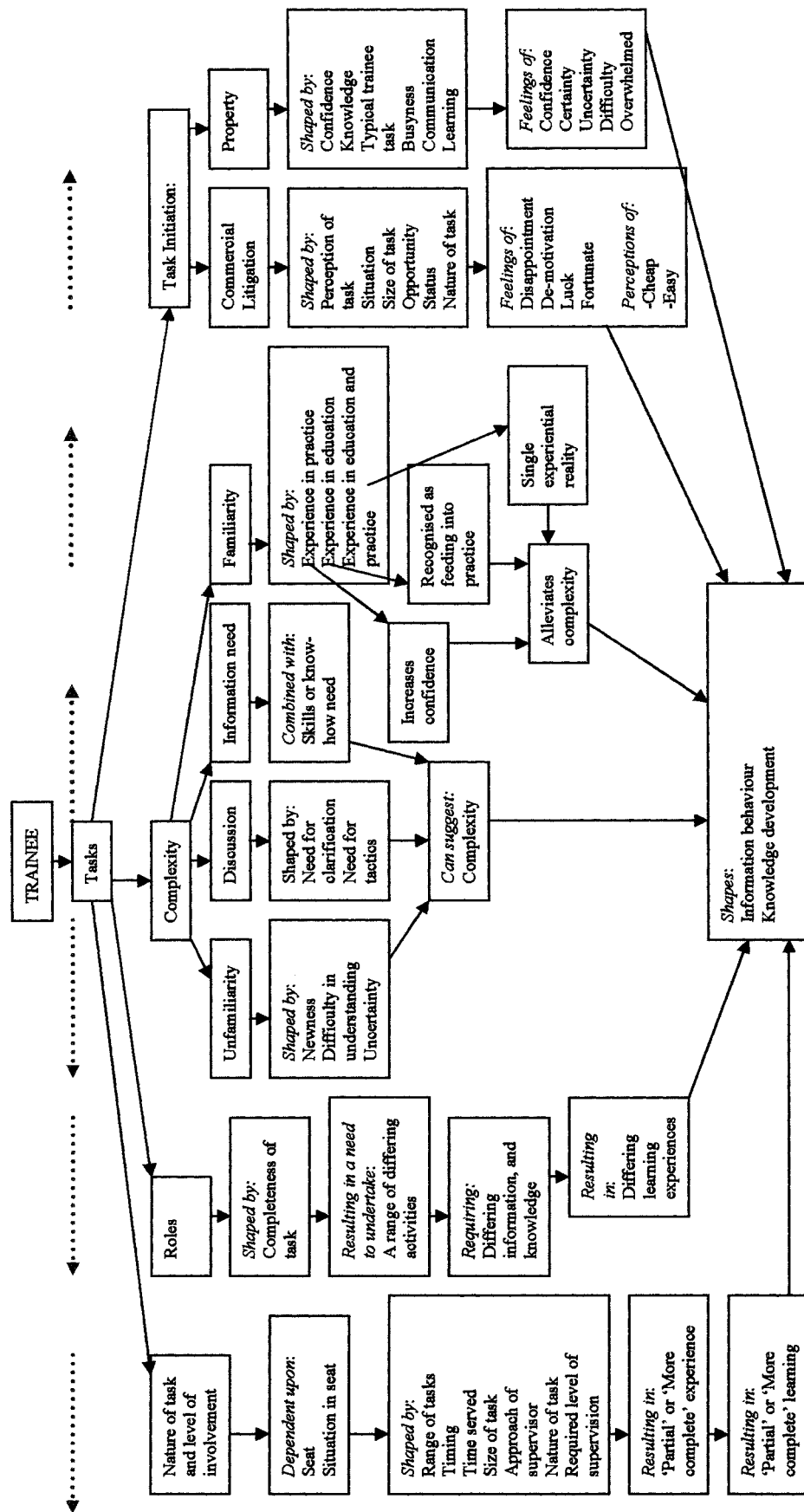


Figure 25. Collated diagram of the information behaviour of trainee solicitors

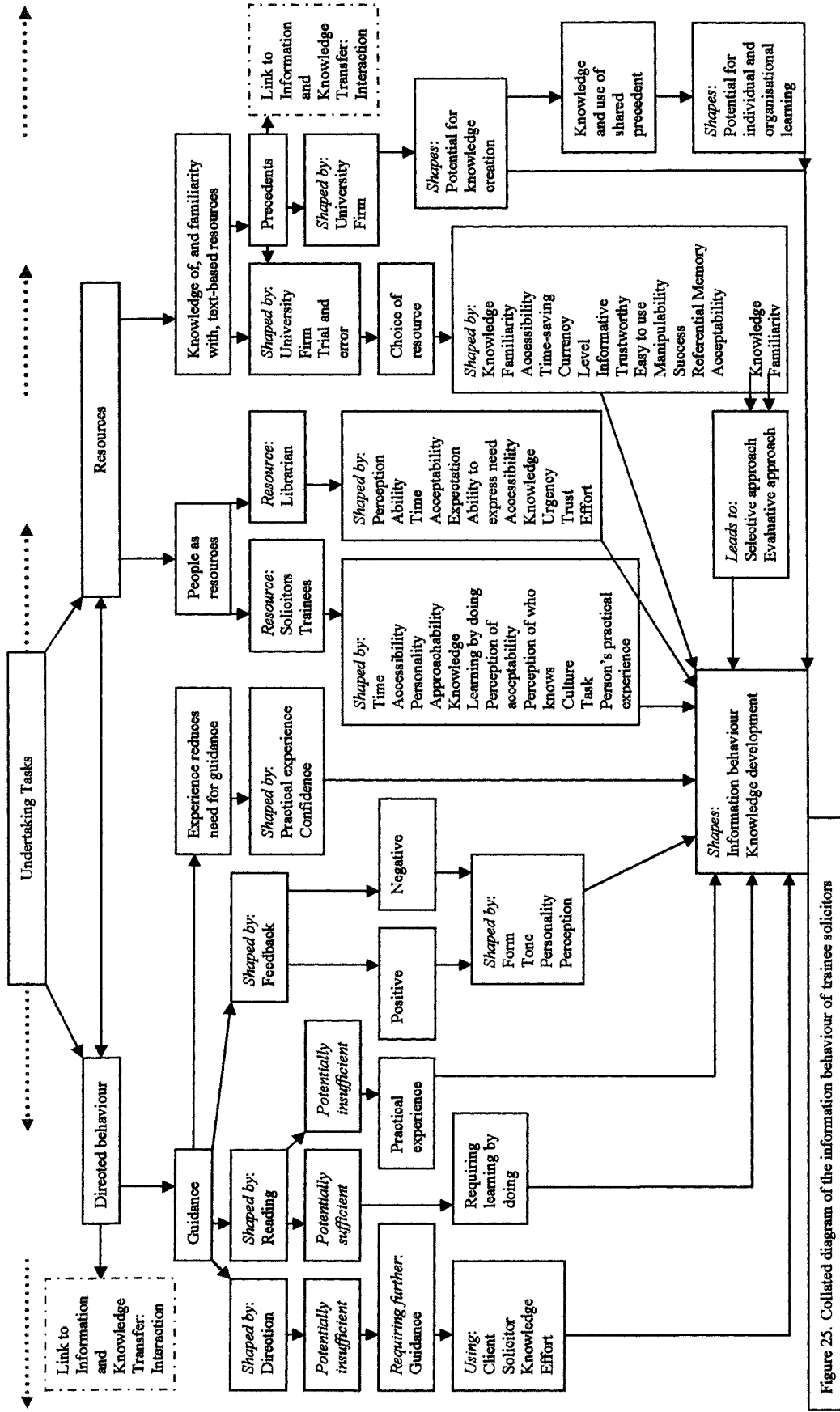


Figure 25. Collated diagram of the information behaviour of trainee solicitors

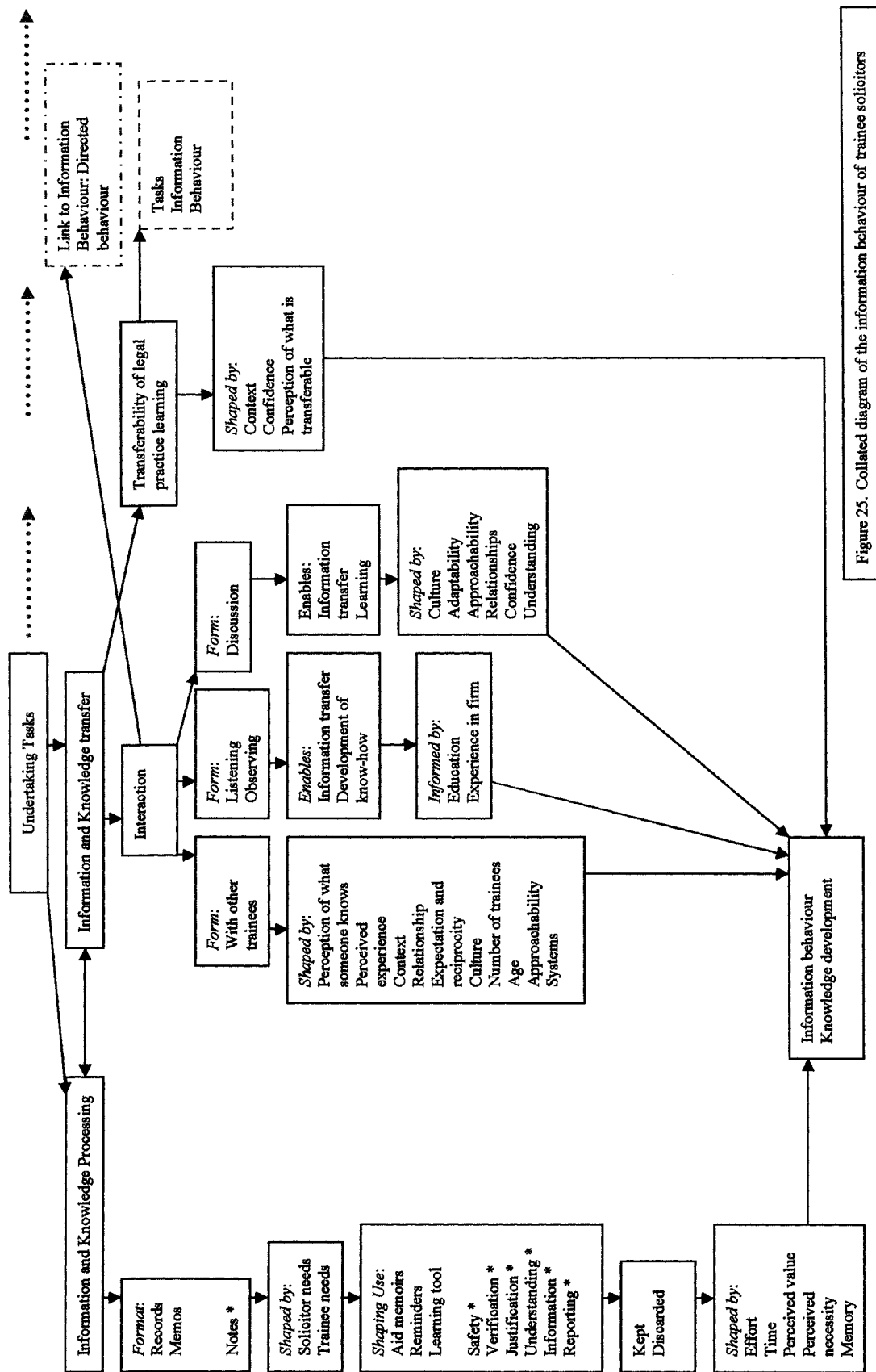


Figure 25. Collated diagram of the information behaviour of trainee solicitors

References

- Baker, A. C., Jensen, P. J. and Kolb, D.A. (2005) 'Conversation as experiential learning', *Management Learning*, 36 (4), pp. 411 – 427.
- Bandura, A. (1986) *Social foundations of thought and action*, Prentice-Hall.
- Brown, B. L. (1999) 'Self-efficacy beliefs and career development', *ERIC Digest* 205 [Available at: <http://www.ericdigests.org/1999-4/self.htm>] (Accessed March 2007).
- Casey, A. (2005) 'Enhancing individual and organisational learning: a sociological model', *Management Learning*, 36 (2), pp. 131 – 147.
- du Troit, A. (2003) 'Knowledge: a sense making process shared through narrative', *Journal of Knowledge Management*, 7 (3) pp. 27-37.
- Ellis, D. and Haugan, M. (1997) 'Modelling the information seeking patterns of engineers and research scientists in an industrial environment', *Journal of Documentation*, 53 (4), pp. 384-403.
- Ford, N. (2004) 'Towards a model of learning for educational informatics', *Journal of Documentation*, 60 (2), pp. 183-225.
- Goriely, T. and Williams, T. (1996) *The impact of the new training scheme*. TPR (Social and Legal Research, Research study no.22). Law Society.
- Hildreth, P.J. and Kimble, C. (2002) 'The duality of knowledge', *Information Research*, 8 (1), paper 142. [Available at: <http://InformationR.net/ir/8-1/paper142.html>] (Accessed 8th August 2005).

Jarvelin, K. and Ingwersen, P. (2004) 'Information seeking research needs extension towards tasks and technology', *Information Research*, 10 (1) paper 212 [Available at: <http://InformationR.net/ir/10-1/paper212.html>] (Assessed: 15th March 2007).

Jarvelin, K. and Wilson, T.D. (2003) 'On conceptual models for information seeking and retrieval research', *Information Research*, 9 (1), paper 163. [Available at: <http://InformationR.net/ir/9-1/paper163.html>] (Accessed: 8th August 2005).

Kerka, S. (1998) 'New perspectives on mentoring', ERIC Digest [Available at: <http://www.ericdigests.org/1998-3/mentoring.html>] (Accessed 17th March 2007).

Kuhlthau, C. C. (1991) 'Inside the search process: information seeking from the user's perspective', *Journal of the American Society for Information Science*, 42 (5), pp. 361-371.

Kuhlthau, C. C. and Tama, S. L. (2001) Information search process of lawyers: a call for 'just for me' information services. *Journal of Documentation* vol. 57 (1) pp.25-43.

Law Society (2005) *Training trainee solicitors; the Law Society requirements*. The Law Society.

Leckie, G. J., Pettigrew, K. E. and Sylvain, C. (1996) 'Modelling the information seeking of professionals: a general model derived from research on engineers, health care professionals and lawyers', *Library Quarterly*, 66 (2), pp.161-193.

Limberg, L. (1999) 'Experiencing information seeking and learning: a study of the interaction between two phenomena', *Information Research*, 5 (1), paper 68. [Available at: <http://InformationR.net/ir/5-1/paper68.html>] (Accessed 7th March 2007).

- McDermott, R. and O'Dell, C. (2001) 'Overcoming cultural barriers to sharing knowledge', *Journal of Knowledge Management*, 5 (1), pp. 76-85.
- O'Donoghue, J. and Maguire, T. (2005) 'The individual learner, employability and the workplace', *Journal of European industrial Training*, 29 (6), pp. 436 – 446.
- Pickard, A. J. (2002) *Access to electronic information resources: their role in the provision of learning opportunities for young people. A constructivist enquiry*. PhD University of Northumbria at Newcastle.
- Stein, D. (1998) 'Situated learning', ERIC Digest, 3 (Available at: <http://www.ericdigests.org/1998-3/adult-education.html>) (Accessed 14th March 2007).
- Wilkinson, M. A. (2001) 'Information sources used by lawyers in problem solving: an empirical exploration', *Library and Information Science Research*, 23, pp. 257-276.
- Wilson, A. M. (2001) 'Understanding organisational culture and the implications for corporate marketing', *European Journal of Marketing*, 35 (3/4), pp. 353-367.
- Wilson, T. D. (1999) 'Models in information behaviour research', *Journal of Documentation*, 55 (3), pp. 249-270.
- Wilson, T. D. (1999) 'Models in information behaviour research', *Journal of Documentation*, 55 (3), pp. 249-270.
- Wilson, T. D. and Walsh, C. (1996) *Information behaviour: an interdisciplinary perspective. A review of the literature*. British Library Research and Innovation Centre. (British Library Research and Innovation Report no. 10).

Yoon, K. (1998) 'The use of certainty and role of topic and comment in interpersonal information seeking interaction', *Information Research* 4 (2), [Available at: <http://InformationR.net/ir/4-2/isic/yoon.html>] (Accessed: 15th August 2001)

5. Discussion and Conclusions

It is likely to come as no surprise to law firms that the seat of training shaped what tasks the trainees were given. That these tasks in turn shaped what the trainees learned, each seat being concerned with a different area of legal practice, and hence the need for a training contract that enables the trainees to develop knowledge and skills in a range of legal practice areas.

What this research has evidenced is that through a consideration of the nature of the work within a seat, the level of involvement in tasks, and the trainees' information behaviour in approaching these tasks, a better understanding of the context of the trainees' knowledge development and how their information behaviour contributes to that knowledge development is achieved.

A review of the literature suggested that although organisations are thought to have been learning from experience they have rarely been capturing and using the knowledge gained from this experience (Wagner, 2003:97). Through considering the information behaviour and related contributory factors that can potentially shape the trainees' knowledge development a firm will be better able to understand how learning is enabled or inhibited.

Through a further analysis and interpretation of the characterisations that emerged from the findings, alongside the resultant mapping of the trainees' behaviour, this research posits a set of theoretical propositions pertaining to the knowledge behaviour of the trainees. Theoretical Propositions are given in *italics*. Practical solutions are offered in relation to methods or approaches that could be adopted by the firm to better enable learning by trainee solicitors.

These propositions, alongside the practical solutions offered, are transferable in that they can be taken by other firms or organisations and considered in relation to their own setting, and used to further their understanding of, the factors that can shape and influence the knowledge development of staff. A table containing the propositions and practical solutions for consideration is included at the end of this section.

5.1 Section Arrangement

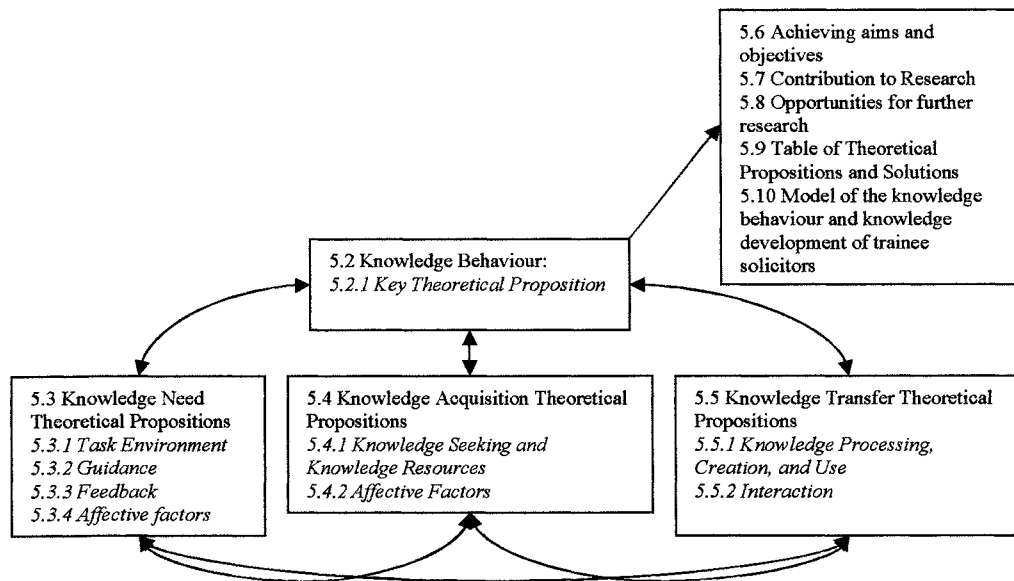


Figure 26. Knowledge Behaviour

Within the literature review knowledge behaviour was suggested by this research as consisting of; a learning need, an information need to enable knowledge development; knowledge acquisition, information seeking and retrieval and through the seeking of meaning as a result of this activity, the acquisition of knowledge; and knowledge transfer, information exchange, use, and creation. Information exchange between people will potentially lead to the creation of new knowledge for each individual. The use of information can lead to the further acquisition of knowledge and the then transference of that knowledge from one situation to another. These headings have been further adapted as a result of the emergent findings and serve as a guide to the reader for this section but it should be noted that these headings cannot be seen in isolation of each other as indicated by the connecting arrows.

5.2 Knowledge Behaviour Key Theoretical Proposition

5.2.1 'Information and knowledge cannot be seen in isolation of each other when it comes to task related behaviour. This resultant complexity of behaviour is better expressed through use of the overarching phrase of knowledge behaviour'

This research posits that any exploration of the information behaviour of professionals in the context of their work environment needs to take into account not only information but knowledge, that neither of these concepts can be considered in isolation of each other, and therefore suggests that research of this nature should refer to knowledge behaviour rather than purely information behaviour. This key theoretical proposition underpins all discussions, conclusions, and theoretical propositions emerging from the findings of this research.

The tasks undertaken by the trainees provided a context for the exploration and constructions of their information behaviour and knowledge development. However, early evidence emerging from this research suggested that when working on tasks, the information required in working towards completion of a task, was inextricably linked to the know-how required in working towards completing a task, suggesting that one cannot be considered in isolation of the other. As prior research indicates, knowledge development is reliant on both information and knowledge (Marchand, 1998:253). Information provides the basis for the development of knowledge surrounding tasks, in providing the means for interpreting and understanding what to do, whereas tacit, that which is considered to be more inexpressible, knowledge development, is suggested as stemming from the doing, from working on the tasks, through the building up of an experiential knowledge of tasks.

Evidence from this research supports Hildreth and Kimble's (2002:15) proposed duality of knowledge, where the trainees were found to not only have a need to seek and use information in working on tasks, but a need to develop an explicit and tacit knowledge of tasks. Furthermore, they were often found to be bringing to bear both explicit and tacit knowledge to tasks. This complexity of behaviour

is therefore better expressed through use of the overarching phrase of knowledge behaviour, thereby enabling consideration of information, that is, knowledge that has been expressed and codified in the form of documents, published resources, files, cases, etc and knowledge or know-how, that is, explicit knowledge, knowledge that can be expressed and therefore has the potential to become information, and tacit knowledge, inexpressible knowledge; that which is acquired over time through experience and practice.

Previous research into Information Behaviour has not neglected knowledge but has tended, for example, to view a gap in knowledge as an initiator of an information need, (for example, Dervin's cognitive gap (Yoon, 1999), and Kuhlthau's (2001:27) initiation stage of her ISP model), rather than explicitly considering information and knowledge as a duality, whereby there might be a need for both information and know-how. Leckie, Pettigrew and Sylvain (1996:173) do acknowledge that lawyers might use their own knowledge but this is not reflected in their model of the Information Behaviour of Professionals.

The findings from this research expand upon the models of information behaviour forming part of the framework for this research to more explicitly reflect knowledge behaviour. The apparent inextricable linking of information and knowledge, and therefore the need to consider knowledge behaviour as opposed to information behaviour, expands upon current thinking within the Information Science discipline and contributes to the discipline of Knowledge Management. The concept of knowledge behaviour and its contribution to knowledge development is explored further through the following theoretical propositions, their discussion, and conclusions.

5.3 Knowledge Needs

5.3.1 Task Environment Theoretical Propositions

Environmental factors enable the setting of the scene for an exploration of the knowledge behaviour of the trainees. These place the trainees in context and

serve to highlight the micro and macro environmental factors that can shape the context of their learning needs and knowledge development.

5.3.1a. 'Tasks can be partial or more complete in nature resulting in partial or more complete learning experiences'

At a micro level, depending on which seat a trainee is situated, evidence suggested that the tasks they were given to undertake were partial or more complete in nature. As a result, their learning from these tasks is suggested as being partial or more complete. The difference in tasks between the two seats is therefore important for firms to acknowledge in relation to the learning experiences afforded the trainees. The more complete the task the more subtasks the trainees can encounter, requiring potentially differing information and know-how, thereby affording the trainees a broader and or more in-depth learning experience.

Through acknowledging that staff can acquire a partial or more complete learning experience whilst training, the firm can take this into account within its continuing professional development (CPD) programme. On becoming qualified into an area where only partial learning might have been achieved during training, the firm could offer staff an increased programme of CPD.

5.3.1b. 'Affordance of opportunities shapes the potential for learning'

Part of understanding the trainees' micro environment and its potential influence in shaping the trainees' knowledge behaviour and knowledge development is to be aware of the differing situations in which a trainee is allocated tasks. All trainees as part of their training will undertake a range of tasks dictated by the nature of the work within the seat, but this research has further identified that situation, other than seat, can shape the opportunities afforded the trainees. Sitting with a supervisor; being in the right place at the right time; having confidence in the trainee; the status of the person for whom the trainee works; and the approach of the supervisor, were identified as affording the trainees the opportunity to become more or less involved in tasks, thereby providing them

with the potential to gain a more complete or partial learning experience. It is important, therefore, for firms to recognise that an increased involvement will afford the trainees a more in-depth experience, requiring differing information and knowledge to meet the needs of these opportunities thereby increasing their overall knowledge development.

Although affordance of opportunity is linked to task initiation it is essentially a stage prior to task initiation in that it is, for example, as a result of being in the right place, or working with those perceived to have high status, or as a result of the confidence of the supervisor in the trainee that these tasks were given to the trainees. This suggests that in modelling the knowledge behaviour of trainees, there is a need to expand the context of task environmental factors to include not only the seat of training and the roles played but situational factors.

5.3.1c 'Research underpins tasks and roles'

In line with Wilkinson's (2001:261) findings, the role of researcher, although identified as an additional role for some of the trainees in this research, would indeed appear to form an integral part of their role as learners, however, it also forms an integral part of work tasks. All tasks indicated a need for research in that they required the trainees to seek information and knowledge in order to meet the needs of the tasks. This research is not the same as that defined in the literature as legal research which is given to mean 'a carefully constructed process of familiarisation with standard legal reference tools, which are usually consulted in a specific order' (Wilkinson 2001:258), and is too narrow in scope to reflect the differing legal research activities evidenced as being carried out by trainee solicitors. For example, in discussing the roles played by lawyers, Leckie, Pettigrew & Sylvain, (1996:174) note how in advocacy work that the lawyer seeks to 'persuade someone what the law should be, or how the law should be applied', and suggest that 'this endeavour encompasses a number of tasks, such as determining relevant cases and precedents, necessitating a search of the primary and secondary legal literature'. Here the focus is on the legal research aspect of a lawyers' work in advocacy, one that this research suggests does not provide the full contextual knowledge behaviour of the lawyer in the role or task

being undertaken, as it does not take into account the contextual factors that shape the need, seeking, and use of that information and knowledge. To appreciate the full contextual knowledge behaviour of the lawyer there is a need to take into consideration the mutual information and knowledge needs of the lawyer in undertaking roles and tasks, of the skills required in persuading, of the knowledge required to enable interpretation, knowledge required of resources, and know-how as to how to successfully manipulate these resources.

This would suggest to the firm and to educators that legal research is broader than searching primary and secondary legal literature and that there is a need to develop a more holistic approach to legal research training. Rather than teaching or seeing legal research skills as being separate from skills such as advocacy or drafting, there is a need to more explicitly link legal practice areas under study with a need for research, thereby increasing the potential to impress upon the trainees that research underpins and compliments all aspects of legal work.

5.3.1d 'Roles can indicate tasks but tasks can indicate further roles to be played and drive knowledge needs and learning experiences. Tasks that require a range of activities and differing roles to be carried out will result in a broader learning experience.'

The findings of this research expand upon prior research by Leckie, Pettigrew and Sylvain (1996). This research identified that although roles might indicate types of tasks to be performed, each activity or task, in addition to indicating initial information and knowledge needs, can also indicate a need for further roles to be played. Furthermore, each task can result in a set of sub-tasks or activities leading to a need to enact further differing roles, these sub-tasks and differing roles again requiring potentially differing information and know-how. This suggests to the firm that tasks drive the knowledge needs and the learning experiences of the trainees, and that tasks that require a range of activities and roles to be carried out will result in a broader learning experience for the trainee.

In relation to the types of roles played by the trainees this research supports the findings of Leckie, Pettigrew and Sylvain (1996:173) who identified four roles of

relevance to the trainees, those of drafting, advocacy, negotiating and counselling. The fifth role identified by Leckie, Pettigrew and Sylvain, that of management, was not identified but this would not suggest itself as a role for trainees who, as learners, are not in a position to be given a management role. However, as noted above, these roles when undertaken by the trainees were identified as being dependent upon task and not just the role of the trainees within the firm.

Furthermore, when considering Wilkinson's (2001:270) findings that suggest only two roles, this research would posit that in relation to the role of service provider, defined by Wilkinson (2001:270) as, 'when lawyers are engaged with the substantive areas of law in meeting their clients' needs', that this service provider role is likely to further encompass, as required, the roles of drafting, advocacy, negotiating, and counselling. Through the trainees' constructions of their involvement in a single task on a single file matter, the trainees were found, in meeting the needs of that file matter, and therefore the clients' needs, to often undertake a range of these roles.

The role of the trainees is as learner, however, depending on the type and size of task they are given to undertake, this can result in a range of further roles needing to be enacted, for example, that of drafter, advocate. Furthermore, the size of task can also suggest a need for a range of differing task-related activities to be carried out. As a result, through involving the trainees in more complete task-based exercises, such as the buying of property, as opposed to partial task-based exercises, for example, correspondence or drafting, there is the potential for the trainees to experience a range of roles and legal practice activities, enabling the trainees a broader learning experience.

5.3.1e 'Knowledge development is dependent upon context and the individual's accumulation of experiential know-how in context. Knowledge development as a result of increased experiential know-how better enables transferability of that know-how to other tasks, however, this transferability can be context bound'

As the trainees are learners, it is not unexpected that unfamiliarity with a legal practice area emerged as influencing the trainees' ability to undertake tasks, and potentially resulted in their perceiving the task to be more complex, and that this unfamiliarity led to a need for further information and know-how. However, this research does provide evidence of the importance that increased experience plays in the ability of the trainees to develop their know-how, and to become able to transfer that know-how across differing file matters. Experience was also identified as increasing the trainees' confidence in their ability to tackle tasks, shaping their attitude to tasks, known and unknown. Experience, and confidence gained through experience, therefore enables the trainees to become more competent learners, learners who can apply acquired knowledge to solving problems and adapt existing knowledge to the demands of new, unfamiliar problems (Rowbotham, 2004:26). However, this research has identified that much of this experiential know-how was only transferable within the same seat within which it was acquired; only certain elements such as dealing with clients and colleagues were perceived as being transferable across differing seats of training. Knowledge is suggested as being acquired situationally and transferring only to similar situations (Stein 1998:1). Context is therefore of importance when considering how the trainees develop their knowledge, as the findings of this research would indeed suggest that what has been learned in one context is not necessarily transferable to another. This could further imply that the time spent in each of the seats during training potentially only provides a taster of the work involved within a law firm, and that the trainees' know-how is only likely to become more fully developed once in their qualifying seat, where they will further acquire experiential know-how in context. This know-how however, will be focussed in the context of a particular legal practice area and will not necessarily be transferable to all practice areas covered by the firm. This highlights to the firm the importance of context in the development of a trainees' know-how and how this know-how is built up over time through further experience in context. Through acknowledging how context and experiential know-how shape a trainees' knowledge development the firm is better placed to understand;

- how the types of tasks allocated to the trainees in any seat of training and the time spent in each seat of training might not be sufficient in themselves in affording the trainees enough experience in context to fully develop their knowledge of, and confidence in, matters pertaining to that seat,
- that confidence is a contributory factor in a perceived ability to undertake tasks, familiar and unfamiliar,
- that for confidence to develop there is a need for increased experience in context,
- what they can realistically expect a trainee to know on completion of a seat of training and that on qualifying into the firm they will still require further learning in context.

Linked to sections 5.3.1a, 5.3.1b and 5.3.1e above, CPD can be used to further knowledge on completion of training and an increase in opportunities to undertake more complete task-based exercises can afford the trainees a broader experience whilst in training. Both of these solutions are likely to increase confidence as they provide the trainees with an increase in experience.

5.3.1f. 'Experience gained whilst in education does not necessarily translate into practice and requires further learning in situ'

At the macro level know-how in relation to legal practice was linked in some instances to time spent in education, but for some trainees what was learned in education was not always seen as directly transferable into practice. Plus, it was not always easy for the trainees to realise what knowledge they brought to the firm from their time in education, or how they came to know what they know. It is possible that what was learned at University, or on the Legal Practice Course, has become embedded within their experiences gained through working within the firm to form a single experiential reality. This suggests that both experiences have contributed to their knowledge behaviour and knowledge development. However, as experience gained prior to the seat is not necessarily perceived as being directly transferable into practice, this does seem to indicate a need for further learning in these areas in situ. Whatever the reason for this sometime

incompatibility between education and practice, it would seem important for law firms to recognise that despite the trainees' legal education, the firm cannot assume that something has been learned, or that what has been learned is easily recognised as being transferable into practice. Furthermore, this sometime incompatibility helps to explain why the trainees can experience feelings of uncertainty, even when faced with what the firm, or the trainees, might consider as being seemingly straightforward, typical trainee, or routine type tasks.

Acknowledging that what has been learned at University is not necessarily seen as directly transferable into practice has implications for the firm's training programme. By not assuming that the trainees are familiar with legal practice areas provides the firm with the opportunity to design a programme that does not assume prior knowledge, and that incorporates the skills and knowledge that they would want their trainees to have on qualifying, in addition to meeting the needs of the Law Society (2005) requirements. Through taking this approach all trainees are likely to feel more confident, realising that where they are perhaps more unfamiliar with some legal practice areas they are not going to be at a disadvantage. Furthermore, through feeling more confident they are likely to feel more able to tackle tasks, familiar and unfamiliar.

5.3.1g 'Tasks can be more complex than they might initially appear, suggesting a need not only for information and know-how, but a need for further learning, over time, through practice, and in context.'

Through exploring the types of tasks that the trainees were given to undertake, a better understanding of their complexities was revealed and how these complexities shaped the trainees' knowledge development needs. Task complexity has been highlighted as an important, influential factor in information seeking behaviour in work situations, and has been defined as non-routine, un-analysable, involving the processing of equivocal information, and evoking different approaches to information seeking, than do tasks that are routine, analysable and involve less equivocal information (Kuhlthau & Tama, 2001:27). Although the trainees' tasks might be considered on allocation to be fairly straightforward or routine, when considering the range of roles that a trainee

potentially enacts in working towards completion of a task it is suggested by this research that these varying roles are likely to increase task complexity as perceived by the trainee. The roles enacted by the trainees reflect the multiple realities of the initial task. Therefore, the task can be said to be composed of many parts, and is not always as simple and straightforward as its initial routine nature might suggest. In addition, the use of tactics and negotiation suggests potentially differing approaches to the task, and the processing of equivocal information dependent upon the context of the task. The need to be able to judge what is appropriate and acceptable behaviour when working with clients also suggests a need for the trainees to bring to bear more than an analysis of the situation, but of a tacit judgement of the situation, and as such these tasks cannot be said to be routine. All of this suggests that task complexity increases knowledge needs, as any resultant varying roles and sub-tasks will potentially suggest differing needs in working towards task completion.

The identified shaping factors of unfamiliarity, skills development, and discussion surrounding task complexity in section 4.2.3 are indicative of the trainees' existing knowledge, what they are certain about, and their potential knowledge needs, what they are uncertain about, and a need to find out. Through a consideration of these shaping factors the firm is better able to understand the potential variances behind the trainees' knowledge needs. Furthermore, they help to illustrate to the firm that learning how to tackle a task can often require more than the seeking of information and know-how to meet the needs of the task, but the development and use of tacit knowledge and skills. In addition, the shaping factors of unfamiliarity, skills development, and discussion, serve to illustrate that the trainees' learning is often gradual, requiring further practice in context. This is further evidenced by the category 'familiarity' where the trainees were found to potentially perceive tasks to be less complex where an increased familiarity with practice areas through, for example, prior work experience, was found to boost their confidence in their perceived ability to carry out tasks, familiar and unfamiliar, thereby alleviating complexity. An increase in confidence in being able to tackle tasks, familiar and unfamiliar, as a result of an increase in experience, is also potentially indicative of how the trainees are

becoming more comfortable in learning how to learn, demonstrating increased levels of self-efficacy (Bandura, 1986:391), and of an increased expertise.

Tasks can be perceived as more complex where the trainees need information and know-how to be able to enact several roles; as a result of being unfamiliar with the legal practice area; a need to develop skills in tactics and negotiation; and to make judgements on situations. Through acknowledging that these skills are developed over time, through practice, and through discussion in context; that the trainees become more confident with increased familiarity, the firm is in a better position to consider methods of enabling the trainees to develop, and to practice these skills, and to build these into their training programme.

5.3.2 Guidance Theoretical Propositions

5.3.2a 'Initial guidance on how to approach tasks can both inhibit and encourage effectiveness and efficiency in terms of individual and organisational learning'

Guidance was identified as a key shaping factor in the knowledge behaviour and knowledge development of the trainees. Guidance is suggested as being a key characteristic in enabling learning (Kerka, 1998:3). Through the offering of guidance to the trainees the firm is essentially working towards improving their behaviour and capabilities so that they (the firm) can more effectively and efficiently respond to the needs of their environment, that is, the needs of their current and potential clients. However, guidance was found to vary in level and detail. For example, guidance on task initiation indicated where the trainees should start, thereby increasing effectiveness and efficiency of approach. This guidance however, was not always sufficient for knowing how to approach the task as a whole, often resulting in the trainees having to then rely on their own ability to identify alternative methods of finding out what to do, thereby potentially delaying their effectiveness and efficiency in responding to the needs of tasks and therefore clients. Conversely, however, through having to identify alternative methods themselves the trainees are potentially also broadening their learning experiences, and importantly, learning how to learn. For example, being

guided to read about a file matter proved insufficient in itself for one trainee to know what to do but it also enabled the trainee to recognise that they learned better through practice, through learning by doing. For another trainee, not being directed to specific named resources suggested that they would have to make the effort to find out what resources are available to satisfy the needs of the task and thereby increasing their knowledge of resources and their ability to identify resources themselves. Having been initially directed as to where to start, the knowledge seeking approach adopted by another trainee, who then made use of the file, the client, and the supervisor, enabled them to build up a more experiential knowledge of the file matter.

Acknowledging that guidance can improve the behaviour and capabilities of the trainees so that the firm is more quickly able to efficiently and effectively respond to the needs of its clients suggests that guidance as to what to do should be explicit. However, accepting that the trainees also learn how to learn, often by trying to find their own way around tasks, suggests that guidance should not be so specific. Providing a balance of opportunities is a likely solution with initial guidance on ideas as to how to approach the task in hand being provided, thereby promoting confidence in the trainee, but with the trainee then given time to explore the avenues offered, and to learn through this exploration.

5.3.2b 'Where guidance on tasks is specific in nature there is the potential for the more immediate transference of knowledge. Where guidance is more general in nature, no knowledge is transferred, but there is still the potential for knowledge to develop through tackling the task.'

According to Wilkinson (2001:259), it is part of the lawyer's professional expertise to know exactly where the information relevant to the legal problem is. This research has found, however, that this was not always seen to be the case, with the guidance offered to the trainees often being more general than specific in nature. For example, directing the trainees to use the Internet or to look up a book suggests that either the solicitors do not know, or cannot remember, exactly which resources the trainees should use. However, guidance of this nature could also be as a result of the busyness of the solicitor, where he or she feels that they

do not have the time to consider which resources the trainees should use. It is perhaps also likely that the solicitors have developed their own expertise of legal practice areas, as a result of experience and by becoming immersed in that legal practice area, and perhaps do not have to resort to the texts as a result of this acquired expertise. Furthermore, where they have a trainee, the carrying out of research is a task commonly passed over to trainees and as such the solicitor might not have had any reason to use these texts themselves for some time. But it could also be as a result of an expectation that this is how the trainees should learn, by discovering appropriate resources themselves. The literature provides a number of supporting reasons. While some studies have suggested attitude, in that many lawyers dislike legal research and prefer to farm it out to students and junior lawyers, others have noted that lawyers are often unwilling to delegate information-retrieval activities, since often they do not know exactly what piece of information may be crucial. In an organisational context, lawyers in large specialised firms may have the in-house resources to delegate all or parts of their legal research, while those in small firms may have no choice but to conduct their research themselves. Lawyers with greater experience may be able to draw on their own professional knowledge to a greater extent or may be able to refer the case to a colleague, thus eliminating the need for certain kinds of legal research (Leckie, Pettigrew and Sylvain, 1996:175).

Whatever the reason for providing guidance that is general in nature, guidance is a form of interaction and offers the opportunity for an exchange of knowledge between solicitor and trainee. Where knowledge is exchanged in the form of which resource to use, the trainees are enabled to more immediately add that knowledge to their own experiences. Where knowledge is not exchanged in the form of known resources, then the trainees need to either utilise what they already know about resources in that legal practice area, or to utilise other resources that might help guide them to named resources, for example, by approaching other people, or through browsing in the hope of identifying relevant resources. All of these attempts, whether successful or not, are likely to add to the trainees' knowledge. For example, asking others can help the trainees to construct a mental model of who knows or does not know. Browsing can help build a mental model of resources found to be of use and those found not to be of

use to the task in hand. Utilising one's own knowledge of resources, where successful or unsuccessful in identifying an appropriate resource, reinforces knowledge of that resource and its potential usefulness for any similar tasks faced in the future.

Linked to 5.3.2a above, for specific guidance to be given to the trainees as to any potential avenues to follow, it would appear that there is also a need to ensure that the solicitors are themselves aware of the specifics of these potential avenues, or a need to ensure that the solicitors spend time preparing some guidance to be given to the trainees. Within the literature surrounding learning, it was suggested that to enable individuals to learn, that content and skills should be made relevant to the learner (Doolittle, 1999). This would require that the solicitors would need to identify what the trainees did or did not know. This might not seem very practical to solicitors who are extremely busy, but the benefits of how this would help the trainees' learning, and how this learning ultimately benefits them and the firm, need to be weighed against time lost in the preparation of guidance.

5.3.3 Feedback Theoretical Proposition

5.3.3a 'Feedback, where constructive and consistently part of the learning process, becomes a key enabler of individual and social learning. A lack of feedback inhibits learning and the transferability of knowledge'

If the firm is to develop the capabilities of its trainees then the findings of this research indicate that the firm needs to tackle how feedback is provided on the work carried out by the trainees. This research has identified that feedback facilitates learning and was found in relation to the trainees to be important, not only to the work carried out by the trainees, but in relation to their affective feelings, and their future approach to tasks. Through feedback there is also the potential for solicitors to share their knowledge with the trainees, to act as mentors, thereby facilitating the learning of the trainees. However, feedback was found by this research to be at times non-existent, and where offered, it was

found to differ between the two seats of training, perceived to be dependent upon the personality of the solicitor, and to vary in presentation.

This research has identified that a lack of feedback can inhibit learning. The social community provides the shaping of the learning and it is the process of interaction with others that produces and establishes meaning systems among learners (Stein, 1998:3). Where feedback, a form of social learning, is non-existent, the firm needs to question how the trainees are then enabled to know whether they have carried out the task correctly, or, where mistakes have been made, are enabled to learn from these mistakes. This is essential if the trainees are to be able to adapt their behaviour when faced with a similar situation in the future, or to be able to assimilate new learning into past experiences.

Furthermore, a lack of feedback can be linked to feelings of uncertainty. Feelings of uncertainty, as a result of no reassurance or feedback that one is doing a good job, could contribute to the trainees experiencing ongoing feelings of uncertainty throughout the performing of a task, as through not receiving feedback how can the trainees feel confident that they are on the right lines? Feedback is therefore a further potential alleviator of uncertainty and an instiller of confidence.

However, what happens when the feedback is more negative in nature? Firms need to consider how feedback is presented as this research has identified that the tone of the feedback provided can negatively influence an individual's future behaviour to such an extent that the individual does not seek guidance from those from whom they can learn the most.

Furthermore, if the solicitor does not provide feedback then the trainee and the solicitor cannot come to a shared meaning or belief as to the best way to approach the task. In addition, if there is no feedback to learn from then neither the trainee nor the solicitor meets the shared objective; for the trainee to learn from the solicitor's experience or to fully learn from the task.

Where the provision of feedback varies between seats of training then the trainees are not being afforded the same learning experiences, or indeed as

complete a learning experience as is possible. Here feedback can be seen to be directly linked to, partial and more complete learning, and to, affordance of opportunity as discussed in sections 5.3.1a and 5.3.1b above.

Feedback is crucial to learning and the firm needs to introduce a policy of providing feedback on all work undertaken. Feedback enables the trainees to reflect upon, and to learn from, their own work, and to learn from the experience of others. Feedback from supervising solicitors to those who are responsible for the training programme can also be used to identify any common mistakes being made by the trainees, to identify areas that, for example, require further practice. Without feedback there is less scope for reflection to inform future learning experiences, on the part of the solicitors or the trainees.

5.3.4 Affective Factors Theoretical Propositions

5.3.4a 'Uncertainty is a key affective factor in relation to knowledge needs.'

Uncertainty emerged from this research as a key affective factor not only in relation to a cognitive gap signifying an information need but in relation to a gap in know-how signifying a need to know what to do and how to do it. For example, this research identified the trainees experiencing uncertainty due to a lack of knowledge of the law and therefore a need to seek further information. But uncertainty was also identified as resulting from a lack of procedural knowledge, a codifiable form of know-how (Hildreth & Kimble, 2002:6), uncertainty due to a lack of skills, suggesting a need for more than information but the development of know-how, and uncertainty as to how to react to the amount of work being allocated, suggesting a need for knowledge of what is acceptable behaviour, and a knowledge of one's own capabilities.

Uncertainty is a key feature within Kuhlthau's (Kuhlthau & Tama, 2001) ISP model and is described as appearing at the initiation, selection, and exploration stages of that model. In considering uncertainty in relation to the knowledge needs of the trainees it was identified that uncertainty appeared at the task initiation stage, where the trainees lacked knowledge of the legal practice area,

but also at the exploration stage, where on working on a file matter they identified a further need to know (4.2.3.1, 4.2.3.4, 4.4.1).

As the trainees are learners then it is not unusual that they should experience feelings of uncertainty, particularly in relation to knowing what to do in the performing of tasks. What is of interest is what causes these feelings of uncertainty, and, importantly, what enables the trainees to move from uncertainty to increased certainty. Through an understanding of these factors the firm will be in a better position to consider methods of enabling the trainees to more quickly move from uncertainty to increased certainty in the performing of tasks.

5.3.4b 'Confidence as a result of prior experience, of feeling optimistic, of increased self-awareness and self-assuredness, can alleviate feelings of uncertainty'

Uncertainty at the task initiation stage was at times found to be alleviated by confidence as a result of prior experience, which is more reflective of Kuhlthau's (Kuhlthau & Tama, 2001:27) formulation stage. Where a trainee has prior experience of the legal practice area then this experience was found to alleviate feelings of uncertainty, even when faced with an unfamiliar task. Confidence as a result of prior experiences within a legal practice area can therefore be said to lead to a more focussed perspective of the problem at the task initiation stage. This would suggest to firms that the more experience a trainee gains within a particular practice area, the more able they will feel able to tackle unfamiliar tasks.

Increased confidence suggested by optimism, although more reflective of Kuhlthau's (Kuhlthau & Tama, 2001:27) selection stage and a readiness to begin a search, was identified at the task initiation stage, and can be said to potentially alleviate feelings of uncertainty. For one trainee, despite the task being unfamiliar, the trainee appeared to express optimism potentially as a result of a realisation that whatever information she found would be of value. This optimism is reflective of increased confidence and would suggest that confidence as a result of optimism, at the initiation stage, can indicate an increased readiness

to begin a search at the initiation stage. Furthermore, optimism as a result of a perception that whatever information was found would be of value has implications for the firm in relation to how task requirements are presented to the trainees. Encouraging feelings of optimism, through ensuring that the trainees are aware that whatever they find in relation to the task will be of value, could result in their feeling an increased confidence and certainty.

Uncertainty at the task initiation stage was found to be alleviated by an increased confidence in one's own judgement and an awareness of one's abilities. This further contributes to the task initiation stage of Kuhlthau's (Kuhlthau & Tama, 2001:27) ISP model through considering the affective factors of self-assuredness and self-awareness. Here uncertainty was in relation to whether one should go against apparent expectations, that is, to work on all of the tasks being passed to the trainee, despite recognising that to do this would result in poor performance. Feelings of uncertainty in this instance were further compounded by concern on the one hand in relation to what people would think were the trainee to raise her concerns about the amount of work she was being asked to do, and on the other hand what they would think were she not to raise her concerns. Acceptable behaviour can be linked to culture where culture is suggested as being embedded in the way people act, what they expect of each other and how they make sense of each other's actions (McDermott and O'Dell, 2001:77). Uncertainty in relation to what is acceptable behaviour regarding the number of tasks allocated to the trainee, and how she would be perceived if she spoke out, suggests that the training programme needs to consider how the culture of the organisation, or department within the organisation, can enable or inhibit the trainees' development. That there is a need to consider methods of encouraging the trainees to be more assertive and aware of the implications of not raising any workload concerns.

5.4 Knowledge Acquisition Theoretical Propositions

5.4.1 Knowledge Seeking and Knowledge Resources Theoretical Propositions

5.4.1a 'Knowledge seeking, and by implication knowledge development as a result of knowledge seeking, is influenced by time spent in education and in the workplace but is further shaped by a range of factors surrounding the perceptions held of resources'

The knowledge seeking process by implication should result in learning, not only in relation to learning skills surrounding identifying, accessing, evaluating and interpreting knowledge resources and the knowledge found, but cumulative learning as a result of knowledge seeking experiences that further enables solutions to be more readily considered for present and future tasks. But what shapes our knowledge seeking paths?

Leckie, Pettigrew & Sylvain, (1996:175) highlight a range of factors thought to influence lawyers' information seeking and use, including attitude, organisational context, experience, education, and the resources available. This research has identified that knowledge seeking was influenced by time spent in education, experience in, and context of, the workplace, and the resources available. Leckie, Pettigrew, and Sylvain (1996:175) further suggest that the individual's perception of the information resource and the information content will impact on the path an individual might take in the information seeking process. Perceptions held of resources, and, or, their content, did indeed emerge as shaping the trainees' approach to knowledge seeking with similar influential factors to that of previous research being identified in the shape of knowledge, familiarity, accessibility, trustworthiness and success. Furthermore, this research also identified some additional factors that emerged as shaping knowledge seeking in the form of time-saved, currency, level of information, referential memory, ability to express need, manipulability and acceptability. Through the contextualisation of these factors within a legal environment this research further contributes to current thinking. According to Ford (2004:183) 'there is increasing

recognition that in order to understand information seeking (in general) we need to understand the context in which it takes place and which to some extent shapes it'. Context, as discussed within section 5.1.1 on environmental factors above, was clearly found to influence the experiences afforded the trainees, their resulting knowledge needs, and by implication, their then knowledge seeking. Through an understanding of the key factors that together shape the trainees' choice and use of resources in the knowledge seeking process the firm is better informed to be able to identify, select, and promote knowledge resources to meet these needs, and to provide training and systems that encourage best use to be made of the firm's knowledge resources.

5.4.1b 'Cultivating a knowledge seeking culture where 'learning by doing' and 'asking' are encouraged and supported, where staff are friendly and approachable, and where knowledge and with whom it resides is visible and accessible, increases the potential for knowledge sharing and knowledge development'

This research has identified that colleagues form an important part of the knowledge seeking behaviour of the trainees, shaping their approach to tasks and their learning. Through a consideration of the conditions under which the trainees seek knowledge from their colleagues the firm will be better able to understand how knowledge sharing and knowledge development is enabled or inhibited.

'People take on the knowledge, values, beliefs, and attitudes of the society in which we live' (Casey, 2005:132). This would suggest that the culture of the organisation within which one is situated will influence learning and how that learning takes place (Lewis, 2002:282; Beijerse, 1999: 103). This research has identified that what the trainees perceived to be acceptable behaviour, in addition to the personalities of solicitors, had an influence on their knowledge seeking behaviour.

A perception of what was considered acceptable behaviour was found to vary across the trainees. At times it was found to be linked to what the trainees perceived to be unacceptable behaviour in that they often, for example, perceived

that the acceptable behaviour was to attempt a task first, as opposed to asking what to do first, and only where uncertain as a result of attempting the task, to then seek the help of others. In other situations it was viewed as acceptable behaviour, where time was of the essence, to ask first, prior to attempting the task, or where as a result of an increased experience of the firm it was considered acceptable and time-saving to ask first. However, in some situations, it was perceived as unacceptable behaviour to go back and seek further advice when uncertain from those from whom the task originated, resulting in the seeking of knowledge from other people resources. Two key shaping factors, personality and preference, were identified as contributing to these differing perceptions as to what was considered to be acceptable or unacceptable behaviour in relation to knowledge seeking from people resources.

Where solicitors were found or perceived to be friendly and willing to chat, the trainees were more likely to feel comfortable about asking or seeking their advice thereby easily enabling the sharing of knowledge. The approachability and personality of staff was also found to potentially alleviate any accessibility issues. Although the ready accessibility of solicitors was identified as enabling more immediate knowledge sharing between solicitors and trainees, where the trainees shared an office with a solicitor, when departments were perceived as being friendly and approachable, ease of accessibility was not found to be an issue.

Preference was also found to be a key shaping factor, contributing to whether a trainee considered it acceptable behaviour to ask first or to attempt the task first. Kolb (1984) and Honey and Mumford (1991) suggest that an individual usually has reliance on, or a preference for, one learning style. However, typically, it was found that as a result of finding it quicker and easier to ask those who are perceived to know, coupled with the possibility of having the task explained to them in layman's terms, preference was to ask. But on the other hand, preference as a result of a belief that one learns by doing and to keep asking could potentially be annoying to those being asked, preference was to learn by doing. This would indicate a preference for an accommodative style of learning where, within this style of learning, individuals are suggested as being willing to try

things out, for example to learn by doing, and to use inductive reasoning or to make practical decisions, interpreted here as reasoning that it would be quicker and easier to ask.

Furthermore, preference, as a result of negative feedback resulted in a preference to avoid asking those who instigated the task and a preference to ask others. Staff, where found to be approachable and friendly, offered the trainees the potential to seek their help and advice as needed. However, the trainees were also found at times to be selective and to evaluate potential people sources in their knowledge seeking, often preferring to approach someone whom they thought would have the required knowledge or experience and discarding those whom they thought would not know. This would suggest that if the firm were to make this type of knowledge more explicitly available, so that anyone could identify at point of need where subject expertise resides or who has had prior experience of types of legal tasks, then this could encourage more immediate effective and efficient knowledge sharing and knowledge development.

Personality and preference both had a role to play in the knowledge seeking behaviour and knowledge development of the trainees. Through cultivating a working environment or culture where all staff are aware of;

- how being friendly and approachable encourages knowledge sharing and therefore learning;
- how through encouraging and supporting differing learning preferences, asking and doing, encourages knowledge sharing and knowledge development, and;
- how through making knowledge and expertise more visible enables staff to select those people resources most appropriate to meet their needs,

the firm will be better placed to encourage more immediate effective and efficient knowledge sharing and development thereby enabling a more efficient and effective learning environment.

Methods that could be used by the firm to foster a more friendly and approachable culture are seminars or activities that focus on customer care and public relations.

Solicitors are not trained as teachers and as such they are not necessarily going to be aware of how people learn. There is the potential therefore, for example, to introduce sessions for those who are given the task of mentoring trainees that afford them the opportunity to explore and understand differing learning preferences.

Knowledge and expertise can be made more visible through the development of products that enable staff to identify where knowledge and expertise resides, for example an experts database accessible via the desktop. Encouraging networking and the sharing of knowledge as a result of that networking is a more informal method of increasing knowledge visibility.

5.4.1c 'Having an awareness of knowledge resources from University and the workplace is insufficient in itself in encouraging use, or indeed for knowing how to use resources. However, knowing what resources are available when combined with increased familiarity in their use, can result in a more selective and evaluative approach to knowledge seeking and resource use'

Wilkinson (2001:271) suggests that the lawyers in her study seemed to be aware of sources of information other than those they chose to use and awareness was not therefore determinative of the choices made as to whether to use them. This research agrees with and expands upon Wilkinson's findings by identifying that not only does an awareness of resources not necessarily result in use, but that this non-use was shaped by a range of factors, including accessibility, location, referential memory, offer of alternative resources, and acceptability. For example, although the trainees indicated an awareness of resources in the library this did not always result in their use of these resources citing accessibility and location as shaping factors. Resources were more readily accessible as a result of their location, being in the same offices as the trainee as opposed to being in the library which was situated on a different floor. An awareness of the 'White

Book' from University did not result in a referential memory of that resource when in the workplace, citing a lack of use at University as the reason for having forgotten this key resource. Awareness of the firm's precedent bank also did not necessarily result in its use, with the trainees being offered alternative access to a solicitor's personal collection of precedents. Furthermore, awareness of the librarian as a resource did not necessarily result in the librarian being used by the trainees, citing, for example, acceptability as a shaping factor.

However, this research also identified that an awareness of resources did not always equate to knowledge of how to use these resources. Not knowing how to use resources could therefore be indicative of why particular resources might in some instances not be chosen, but also why, when using a resource, the trainees were not always fully successful in that use. For example, despite being aware of resources available over the Internet a lack of training in search techniques was identified as influencing the success of searches. Furthermore, despite an awareness of Internet based resources, the trainees were at times found to not always be able to distinguish between the different resources, or to be aware of the differences in the search techniques required, resulting in the trainees relying on learning through trial and error. Although learning through trial and error proved successful, it potentially took longer than if they had been aware of the search techniques to use at the start of the process.

Conversely, where the trainees were found to be more familiar with resources as a result of their time in education or in the workplace, they were also found to be more selective in, and evaluative of, these resources. Increased familiarity with electronic resources, for example, appeared to result in the trainees implicitly evaluating these resources in terms of coverage, content, and authority, in addition to identifying preferences as a result of their evaluations. Increased familiarity with a key resource, and its use whilst in legal practice, resulted in a trainee being able to evaluate and select the most appropriate format, print versus electronic, in meeting the needs of tasks. Linked to section 5.4.1b above, an increased familiarity with where knowledge resides resulted in the trainees evaluating who was the most appropriate person to approach.

All of this suggests that ensuring staff have an awareness of what resources are available to them in the firm is insufficient in itself in encouraging or enabling use. The firm needs to consider methods and tools that better enable the trainees to make a decision as to which resource would best serve their needs, and to provide guidance on accessing, searching, and evaluating resources at point of need.

5.4.2 Affective Factors Theoretical Propositions

5.4.2a 'Perception is a key affective factor in the knowledge seeking process'

Linked to section 5.4.1a above, perception was identified as a key affective factor in the knowledge seeking process, and was found to be linked to time and acceptability, prior success, content, accessibility, currency, and manipulability.

5.4.2b 'A perception that it is unacceptable to spend time browsing resources suggests a need for more explicit guidance at point of task allocation'

A perception that time is of the essence was identified as influencing the trainees' knowledge seeking behaviour and is potentially linked to the culture of the firm. What is discovered about learning within the context of one organisation is situated in and bound up with the practice and social and cultural settings of that organisation (O'Donoghue & Maguire, 2005:440). As time is of the essence in the work of solicitors due to their billing procedures, this perception that spending too much time browsing is inappropriate use of time is perhaps related to cost efficiency and effectiveness. However, the need to browse also suggests that the trainees are, on the one hand, not as familiar as they could be with the resources available to them in the library, or on the other hand, that, as learners, they are not as familiar with the task, which in turn will influence their ability to immediately know which resources to use. Either way, in order to ensure more efficient and effective use of resources and time, there is a need to provide guidance as to specifically which resources would potentially be suitable at point of task allocation.

5.4.2c 'Resources that are perceived to hold the required information, or to be current, or easily accessed and manipulated, are more likely to be re-used. Prior success in the use of a resource will also encourage re-use'

Perceptions surrounding resources, their content, currency, accessibility, and manipulability, in addition to a prior success rate, were identified as shaping the trainees' use of resources. Where a resource is considered to hold appropriate content and to be comprehensive in coverage there is the potential for that resource to be perceived by the trainee as saving time, by providing all the information required in one resource. However, coverage was also identified as an evaluation criterion where, linked to section 5.4.1c above, trainees were found to evaluate electronic databases in terms of coverage, perceiving no one resource to necessarily contain all the required information. Currency of information is likely to be a key selection criterion for the trainees as they will need to keep track of changes to the law, and a perception that a particular resource is updated regularly will therefore influence choice. Ease of accessibility was identified in relation to location, being accessible from the desktop, or within easy reach of the trainee, for example, held on the same floor, encouraged use. Manipulability in terms of being able to print out the required information or to cut and paste encouraged use. Prior success in retrieving the required information encouraged re-use. Marchand (1998, 258) highlights the variable quality of information accessible by people in the workplace, the need to be 'able' to access the information available, identifying a challenge in the 'usage' and 'accessibility' of information that others have produced. Through understanding the factors that shape the trainees' use of resources the firm is better informed as to the evaluation criteria that could be used when reviewing resources held and for purchase, in considering format and how resources should be made available, and in designing training and guidance on resources held or newly purchased.

5.4.2d 'Trust is a key affective factor in the knowledge seeking process but is often insufficient a reason in itself for selecting a knowledge resource and is linked to personality, perception, responsibility, an ability to express need, the need for a shared language, tacit insight, and authority'

Trust has been identified as enabling learning and knowledge sharing. Trust facilitates learning between partners, and decisions to exchange knowledge under certain conditions will be based on trust (Boussouara & Deakins, 2000:207). Trust was identified by this research as influencing the trainees' willingness to use people and text-based knowledge resources but was found to be insufficient a reason in itself for selecting a resource, and was identified as being linked to personality, perception, responsibility, an ability to express need and authority.

Linked to personality as discussed above, the trainees were identified as more likely to approach those whom they perceived to be friendly and approachable, suggesting an element of trust in the willingness of those approached to share their knowledge with the trainees. Trust was also identified in relation to the trainees' willingness to use the librarian or other trainees as a knowledge resource. Despite trusting in the librarian's ability, as demonstrated by their acknowledgement that the librarian was very good, the use made of the librarian was influenced by a trust in whether the trainees perceived that the librarian would know, and, in relation to a need to trust that the correct information was found, preferring to rely on their own judgement. This was also found to be true in relation to the trainees' use of other trainees, where a perception of what other trainees would know, and their perceived experiences, were identified as influential factors. Given the nature of legal work, it is likely that the lack of trust expressed here is not a true lack of trust in the librarian or in the other trainees but of a need to take responsibility themselves in ensuring that the correct information is found. Wilkinson (2001:258) highlights the professional responsibility of lawyers in undertaking tasks, being part of a self-regulated profession with a public responsibility. However, in addition to a need to take responsibility, not trusting in the librarian to find the required information is also likely to be as a result of the trainees' inability to clearly express need. As the trainees are new to legal practice they are unlikely to be fully knowledgeable of all legal areas, potentially having no idea or only a vague idea of what is required, resulting in an inability to fully express need and a need to browse in the hope of coming across what they need. This further suggests that browsing as a result of an inability to express need is also potentially influenced by the need for a shared language, or understanding, and tacit insight. 'Not only do people of

different cultures speak a different language but also the way in which the language is applied varies significantly between cultures' (du Toit, 2003). The trainees were not found to have a problem in expressing their need to other trainees or solicitors. But they did have the perception that as the librarian was not a lawyer there would be a problem in explaining what they required, suggesting the need for a shared language in order to reach a shared understanding. A need to browse as a result of only having a vague idea as to what is required suggests that the trainees are bringing to bear their tacit insight to the task. Despite an inability to explicitly express need, through browsing the trainees hope to recognise what they need when they see it.

A perception of the authority of text-based resources was identified as influencing trust in knowledge found and trust in the use of knowledge resources. The precedents used by the firm were perceived as being trustworthy resources as a result of a perception that these have been tried and tested and were resources that were used by all. A trust in the authority of web-based resources resulted in their use or non-use, where the trainees were found to be evaluating the trustworthiness of the information found.

5.5 Knowledge Transfer Theoretical Propositions

5.5.1 Knowledge Processing, Creation, and Use Theoretical Propositions

With reference to the literature review, one of the problems with the information processing aspect of information behaviour is that information processing is considered to be subjective and is not directly observable since it takes place in the mind of the individual (Wilson & Walsh, 1996:30). This would suggest that we cannot see information processing in action and would therefore also suggest that neither can we see knowledge processing. However, if we accept that during the process of working on a task, that through knowledge seeking and the process of 'formulation, that is, thinking, developing an understanding, and extending and defining a topic from the information encountered in a search' (Kuhlthau 2004:94), then this does suggest that individuals are processing information, are

learning from their information seeking processes, and from using the information encountered as part of that process.

In addition, if we consider Kuhlthau's (Kuhlthau & Tama, 2001:27) ISP model which provides us with what she refers to as the presentation stage, where presentation is suggested as being when the search process is completed with a new understanding of the problem, enabling the user to explain his or her learning to others, this would suggest that in order to present what one has learned, knowledge has indeed been processed, and used.

Through considering how the trainees present and use their findings as a result of tasks undertaken, and the role that this plays in the trainees' learning, this research contributes to the contextualisation of Kuhlthau's formulation and presentation stage.

This research has identified that a range of shaping factors was found to influence whether an individual made and kept records, what if any use was made of these records and their contribution to individual learning.

5.5.1a 'Increased experience and confidence potentially results in a belief that one will be able to bring to bear, at point of need, an experiential memory of prior work tasks rather than a need to refer to past notes or copies of work undertaken. However, keeping and using copies of past work examples can increase learning and reflection opportunities, and procedural note-keeping is a useful coping strategy, potentially alleviating any immediate feelings of stress in staff new to tasks. Furthermore, any copies made of the knowledge acquired as a result of working on tasks are potential examples of the knowledge created as a result of these tasks and can be used as future examples of best practice'

All trainees were identified as keeping some form of record of the tasks that they undertook. These records could take the form of copies of examples of work undertaken, or copies of the memos prepared for those for whom work has been undertaken, or notes taken during the performing of a task. These records can be interpreted as examples of what Kuhlthau (Kuhlthau & Tama, 2001:27) refers to

as the presentation stage, the presentations of the outcomes of the trainees' work and acquired knowledge. However, what was kept and why was found to vary, as was their subsequent use.

The potential value to individual learning of keeping copies of example work or memos prepared for others is evidenced by the range of factors that influenced the trainees' motivation to do so and can be linked to a deep approach to learning, where their motivation to keep copies of work can be linked to vocational relevance (Ford, 2004:196, and Pickard, 2002:66). These included a belief that their future use enabled fewer mistakes to be made; a recognition that a reliance on one's memory was insufficient; useful as a starting point; result in less duplication of work; for future reference; difficulty in identifying, and by implication, retrieving, using, and learning from what others had stored on the computer; and to learn from any feedback provided on memos or example work.

Additional reasons identified included a belief that it was expected behaviour; that all trainees would do this, and, a trust in one's own work as opposed to relying on that of others. However, there is also the implication here that these were kept for use at a future date. For whatever reason copies are kept, all of these influential factors suggest that the trainees are intending using what they have learned as aids in working towards achieving an increased personal mastery of situations, to improve their competencies in tasks, to learn from them, and to reflect on them. By maintaining and re-visiting a record of what happened, who said what, any solution, there is the potential for reinforcing and reflecting on their learning of procedures and any points raised as a result of the tasks undertaken. However, it should be noted that not all trainees were identified as keeping copies of memos or work examples, citing the time and effort required, and the perceived necessity of keeping such work with the computer storing work completed on files, and a trust in an ability to find the required material again. This could of course be as a result of an increased confidence in ability perhaps as a result of prior experience as discussed in section 5.3.4b above.

Notes were also made by the trainees during the process of undertaking tasks. However, unlike the memos or work examples discussed above, these notes were

made for more immediate reasons of safety and verification, to protect oneself by being able to verify what one has been asked to do if approached; understanding, a belief that even if one does not understand what they are being asked to do, by writing everything down there is a hope that on reading the notes alongside the file understanding will come; reporting and justification, in the event of being asked to report back or to justify any approach taken; and information, in case someone else wants to establish what has been going on in the file, or for information on the process followed.

Furthermore, these notes were not necessarily always kept or referred back to after a task had been completed, particularly where these notes accumulated into a worked memo given to the solicitor and a copy kept for themselves, or where at times there was a preference to rely on a memory of worked files. Where there was a preferred reliance on memory this could suggest that the notes made have been processed in the mind of the trainee at least to the extent that the trainees are, perhaps as a result of an increased confidence having completed the task, believing that they will be able to bring to bear at point of need an experiential memory of what they have done in the past.

The literature review (section 3.11.1.1) identified that prior research has shown that affective factors such as context, motivation, stress and coping, can potentially influence need and the information-seeking process. This research has identified elements of these affective factors in relation to knowledge processing. There is a motivation amongst the trainees to keep copies of work examples and memos to aid learning. In addition, the need to take notes for reasons of safety and verification, understanding, reporting and justification, and information, do suggest themselves as methods of coping with any potential demands made of their work, thereby potentially alleviating any feelings of stress. However these potential feelings of stress and coping do appear to be largely short-lived as not all trainees appeared to keep these notes or to necessarily refer back to them after completion of a task, preferring then to rely on having a memory of the file itself or a belief that they will be able to identify a similar file. This could suggest that as a result of working on a task, context in relation to a need to make notes

changes as confidence increases, where the trainees feel able to bring to bear at point of need an experiential memory of what they have done in the past.

Through acknowledging the value of learning from past work experiences the firm is in a position to encourage its staff to keep and to use example copies of past work. However, as identified above, where staff are more experienced, there is an increased potential for them to rely on an experiential memory rather than make use of copies made of past work. In these instances the firm could consider encouraging experienced staff, where they come across something new, to keep records of solutions. Furthermore, to enable collective as opposed to purely individual learning, there is then the potential for the firm to gather these records and to make them available to others, via, for example, a central electronic knowledge collection and to encourage their use.

Through acknowledging why the trainees keep notes on tasks, and their potential influence in enabling coping and alleviating more immediate feelings of stress, this can be encouraged as not only accepted practice by all but then be used to work towards identifying best practices. Furthermore, keeping copies of solution memos, as described above, does not necessarily provide us with an overview of all the stages gone through when working towards task completion as these memos tend to be in a format acceptable to the person for whom the work was undertaken. By gathering and using notes of the stages worked through, best practices can be better identified. These examples of best practice can then be made available for others to access and use as required via a central knowledge based system.

Examples of both types of records can be introduced and used in training and induction sessions to the firm as a whole and to individual departments.

5.5.1b 'The creation and use of precedents enables knowledge transfer and knowledge development. Where use is made of a shared precedent system there is the potential for the individual and the organisation to learn, however this system would need to be kept up-to-date'

Precedents are commonly used within law firms and act as templates for certain types of work, for example, the drafting of leases, whereby staff can adopt and adapt an existing precedent to meet the needs of the task in hand. The use and adaptation of precedents are therefore examples of knowledge creation, and where variations of worked precedents are stored on a central system, such as a precedent bank, then there is the potential to share this knowledge across the firm. Individuals can access and learn from work that has been previously used and created by solicitors within the firm. They can manipulate that work to suit their individual task needs, ultimately adding any new, manipulated precedent versions to the precedent bank for future learning, use and adaptation by others in the firm. Importantly it also reduces the need for duplication of effort, thereby saving time and effort.

Interestingly, although the trainees were found to all be aware of precedents, little use appeared to be made of the central precedent bank, with the trainees being directed to copies held by solicitors on their own files. Although this should still result in learning on the part of the trainee, and in learning by others where others are referred to the same precedent either by the solicitor or the trainee, there is the potential for the firm to further use this knowledge. Ensuring that all solicitors update the central precedent bank with new and reworked precedents would enable all staff to access this in-house created bank of knowledge, thereby furthering the potential for knowledge sharing, knowledge development, and further knowledge creation.

5.5.2 Interaction Theoretical Propositions

5.5.2a 'Interaction is a primary form of knowledge sharing and underpins knowledge need, and knowledge seeking'

A review of the literature revealed that within information behaviour, information exchange is given to be when one seeks information from another, and that the use of the term exchange is intended to draw attention to the element of reciprocity recognised by sociologists and social psychologists as a fundamental aspect of human interaction (Wilson 1981:4). Wilson further

suggests that in terms of information behaviour the idea of reciprocity may be fairly weak in some cases, as when a junior scientist seeks information from a senior but hierarchically equal colleague, but strong in others where the process might actually inhibit information transfer, as when a subordinate person in a hierarchy fears to reveal his ignorance to a superior. This research has found that knowledge exchange was indeed found to be linked to reciprocity. For example, reciprocity was linked to expectation in situations where the trainees felt that they would share not just what they knew, but examples of worked carried out, with other trainees as a result of believing or an expectation that these other trainees would also share with them. Furthermore, one could also argue that every interaction between trainee and solicitor had a reciprocal element as through any exchange the trainee is potentially learning and this learning will in turn benefit the firm as a whole. At times, reciprocity as defined by Wilson above could be said to be weak, where the trainees would receive more than they would give but as learners this is to be expected. At other times reciprocity could be said to be strong, for example, where the trainees did not feel able to interact with solicitors on receiving instruction, feeling unable to ask questions perhaps as a result of not wishing to show their ignorance, or because of a lack of knowledge and therefore an inability to know what they should ask. However, this research has identified a range of additional factors found to shape interaction and knowledge exchange thereby adding to current thought.

People were found to play a key role in the knowledge seeking behaviour of the trainees, and the sharing of what one knows was found to depend largely on the interactions between trainee and trainee, and trainee and solicitor. In the discussion surrounding interaction, it was found that interaction was linked to the knowledge behaviour of the trainees in relation to knowledge need and knowledge seeking, and the decision to interact or not was found to be influenced by a range of factors:

- knowledge need:
 - guidance as to how to progress with a task relies on interaction, written or face-to-face. However the depth of guidance provided

can depend on what the solicitors wants to offer and on the trainees' willingness to ask questions

- Feedback enables the sharing of the solicitor's knowledge with the trainee but is reliant on feedback being offered in the first place

- knowledge seeking:

- preference, where preference of the trainee is to ask or not and thereby to interact or not with others
- personality, where friendliness and approachability of staff shaped choice of who the trainees felt they could interact with
- awareness of people resources and therefore an awareness of who to interact with
- the acceptability of approaching people, and therefore the acceptability of interacting with people
- trust in others' work or advice versus a trust in one's own judgement
- a need for a shared language in order to interact

5.5.2b 'Interaction through team work, observation, listening, and discussion encourages knowledge sharing and learning. However, there is still a need to practice what one has learned to enable knowledge development'

As learning is social and situated then it can be posited that context provides the setting for examining experience and that the social community provides the shaping of the learning (Stein, 1998:3). The law firm is one community, but within the firm sub-communities can be identified in the form of the legal practice areas. The trainees spend six months learning about an area of legal practice such as Commercial Litigation or Property (context) and can be said to be working within a community, in that the community focuses on a particular area of law, with the trainees sharing in, and making use of, the knowledge of those within that legal practice area.

Working as part of a sub-set of a legal practice community was also identified in relation to the tasks the trainees were given to undertake. For example, when

working within Commercial Litigation there is a clear suggestion that you are always working in teams, as a result of the nature of the work which required the trainees to undertake elements of tasks and to be closely supervised. Within Property there is more of a suggestion that you can be expected to run with tasks and are not necessarily always working as part of a team per se, although where undertaking work on behalf of a supervisor you do have someone to approach for guidance and as such can be said to be part of a team. Often the sharing of knowledge in these task related situations was linked to knowledge seeking as discussed in sections 5.4.1 above, however, the trainees were also found to share and develop their knowledge as a result of observation, listening, discussion, and practice.

Learning from observation and listening was at times found to be linked to sharing office space. Where sharing an office the trainees were found to be learning people skills. Through observing and listening to others they were developing an insight into the behaviour of those with whom they shared, such as being able to tell when people were busy or concentrating, or gaining an insight into how to speak to clients on the phone, or how to delegate to others. Learning through discussion was emphasised particularly by those trainees who sat with their supervisor. Discussion of file matters and the talking through of the supervisor's thought processes, and what the supervisor would consider doing when faced with certain situations, provided the trainees with a deeper insight into the file matter and any potential approaches. Discussion, in some instances was suggested as being linked to culture, for example, Commercial Litigation was viewed as being very chatty, where staff were found to regularly discuss the file matters they were involved in. Here, discussion was not always viewed as positive and can be linked to preference, where the trainee was found to prefer to be able to get on with her work rather than discuss where discussion was seen as an interruption. This situation required the trainee to learn to adapt to the environment and to see the value of discussion in enabling the sharing of knowledge.

Despite the clear value to knowledge development of observation, listening, and discussion around how others approach their work, is this likely to be sufficient

for knowledge development? Listening, observation, and discussion can be linked to the development of tacit knowledge or understanding in the trainees, but as Hildreth and Kimble (2002:10) suggest, there is also a need for the learner to become immersed in practice, which suggests that there must be a need to practice what has been learned. There is a need to be able to try out the approaches observed as working for others, to see if the same approach works for the trainee. Having an insight into how something could be done is not necessarily the same as actually doing it, plus to be able to adapt or adopt approaches one must try them out first, to then question and to reflect on the approaches taken and to learn from that. Discussion, listening, and observing, when combined with practice and reflection, is suggested by this research as being more likely to result in knowledge development and is reflective of Kolb's (1984) experiential learning model.

This would suggest to the firm that yes there is a need to further knowledge development through encouraging interaction through discussion, listening and observing, but that the trainees need to then be able to try out what they have identified for themselves, to put into practice what they have learned from listening, observing, and discussing, and can be linked to affordance of opportunities discussed in 5.3.1b above. The firm should recognise that this is different from being allocated a task as part of a team, where the trainee is expected to work on the task and to seek guidance as appropriate. An example that helps illustrate the difference is where one trainee, being told how to go about interviewing clients, then observing and listening to how others carried out interviews, and finally, practicing interviewing themselves, enabled that trainee to better develop interviewing knowledge and skills.

5.6 Achieving Aims and Objectives

The overall aim of this research has been achieved to the extent that a characterisation has been drawn in relation to the information and knowledge behaviour of six trainee solicitors within the context of two seats of training within a law firm environment. The adoption of a constructivist approach to inquiry allowed theory to emerge in respect of the trainees' knowledge

behaviour. The use of a focussed interview narrative tool for data collection provided the possibility for thick descriptions to be presented that characterise that behaviour and provides evidence in support of the propositions. The resultant thick descriptions also facilitate transferability based upon their contextual applicability.

Objectives

- To explore and review current debate on knowledge
- To explore and review literature surrounding learning
- To explore and review current debate on Information Behaviour.

Due to a constructivist approach to inquiry, a review of the literature took place after the first set of interviews, with the themes identified for review emerging from an initial analysis of these interviews. Once all interviews had been transcribed and the iterative process of analysis started, a more thorough review of the literature was undertaken in line with themes identified as emerging from the analysis. As the literature review was linked to the themes thought to be emerging from the iterative process of analysis, it can be considered to be more selective than comprehensive. Furthermore, use was made in this study of that research which was identified as pertaining to lawyers and that was further considered to fit with the research paradigm of this study, and as a result is selective rather than comprehensive. However, the review has achieved the stated objectives and provides a framework to aid in the interpretation of the emerging themes.

- To identify and examine the conditions which influence information behaviour and knowledge development.
- To investigate and model the information behaviour of trainee solicitors over a two year period within the context of their work environment.
- Through the investigation and modelling of the information behaviour of trainee solicitors consider the trainees' methods of knowledge development.

- Through a consideration of the trainees' methods of knowledge development as a result of their information behaviour provide an insight into potential enablers and inhibitors to learning.

These objectives have been achieved through the following stages of this research. Through the use of open, axial, and selective coding, and memos, the information behaviour and the conditions which influence that behaviour and the knowledge development of the trainees emerged. These were characterised textually and illustrated diagrammatically. Interpretations were drawn which enabled an insight to be gained into the potential enablers and inhibitors to the trainees' knowledge development. Through an iterative process of characterising, illustrating and interpreting, theoretical propositions were drawn and practical solutions proposed. Section 5.9 below pulls together the theoretical propositions and practical solutions into a table. Together these can facilitate transferability, based upon their contextual applicability, and can be used by the firm and other interested parties.

Through taking the key knowledge behaviour themes identified in the theoretical propositions presented in section 5.9, and the environmental, cognitive, social and affective shaping factors identified within the characterisations of the trainees' behaviour in Figure 25 in section 4 of this thesis, this research presents a model depicting the knowledge behaviour and its role in the knowledge development of trainee solicitors. This model can be found in section 5.10 below.

5.7 Contribution of Research

This research has contributed to the field of Library and Information Science through the provision of an in-depth characterisation of the information behaviour of trainee solicitors in the context of their work environment. Trainee solicitors are a professional group not represented to any extent within current information behaviour research literature. Furthermore, whereas much of the existing research in this field has tended to focus on aspects of information behaviour, such as information seeking and need, this thesis provides a more

holistic characterisation of the information behaviour of trainee solicitors, considering need, seeking, processing, transfer and use.

This research also contributes to current thinking surrounding a need to take a more task-based approach (Jarvelin and Ingwersen, 2004) to the study of information behaviour. This research has identified that a range of influential factors can shape an individual's behaviour, in addition to the behaviour that takes place between tasks and information sources.

Through an exploration of the information behaviour of trainee solicitors this research also contributes to the fields of Library and Information Science and Knowledge Management through demonstrating the relationship of an individual's information behaviour to their knowledge behaviour and knowledge development.

Furthermore, a contribution is made by this research in furthering understanding of how a law firm can potentially, as a result of acknowledging the knowledge behaviour of its trainees, be better placed to realise any inhibitors or enablers to learning.

This research also expands upon Leckie, Pettigrew and Sylvain's (1996:180) model of the information seeking of professionals to present a new model of the knowledge behaviour of trainee solicitors. Furthermore, this research contextualises the factors identified as shaping information behaviour and also considers these in relation to knowledge behaviour and knowledge development. Through taking the key knowledge behaviour themes identified in the theoretical propositions presented in section 5.9, and the environmental, cognitive, social and affective shaping factors, identified within the characterisations of the trainees' behaviour in Figure 25 in section 4 of this thesis, this research contributes a model depicting the knowledge behaviour and its role in the knowledge development of trainee solicitors.

Adopting a constructivist approach to inquiry, where the research design emerges through 'doing', is also novel in approach on two accounts. Firstly as the design

emerged through doing, the research design as a result of this research must be unique to this thesis as it emerged from particular individuals in a particular setting. However, although unique to this research it can be used as an example for future researchers wishing to further understanding of what a constructivist approach to inquiry can look like, or as an example for those who wish to adopt a constructivist approach to inquiry. Secondly, no research has been identified within information science research that has attempted to more fully adopt the axioms of a naturalistic inquiry. For example, no research has been identified that takes the step of not carrying out a literature review in advance of entering the field for the gathering of data. As a result the findings of this research truly emerged from the data and the purpose of the review of the literature was not to aid analysis but to aid in the interpretation and discussion of the emergent themes.

5.7.1 Reflection on Constructivist Approach to Inquiry

The use of a constructivist approach to inquiry was considered to be highly successful in enabling the research aims and objectives to be achieved. The use of a narrative tool enabled fuller characterisations to emerge that focussed on the work of the trainees and not just which resources they consulted in performing their work, typical of some current research (Jarvelin and Ingwersen, 2004:6). The use of 'story-telling invitations' (Holloway & Jefferson, 2000: 35) helped avoid a focus on 'research', as defined within the literature by Wilkinson (2001:258), and resulted in a richer source of data being gathered, which enabled the provision of a more realistic and holistic construction of the work of the trainees, from their perspective. Through adopting a constructivist approach one is truly transported into the everyday lives of the trainees; the situations they found themselves in, the tasks they were involved in, through to their affective feelings in carrying out tasks and their development as a result of these tasks. However, despite its considered success, this constructivist research journey was not without its issues and limitations. There are reflected upon below.

Entering the field did require that the researcher had experience of the data collection field setting. Without some understanding of legal practice and legal

terminology it would have proved extremely difficult to follow and to follow-up what the trainees were discussing, particularly as through the use of a narrative tool for data collection, the trainees had the potential to relate any work-related situation they wished. In addition, without some understanding of legal practice and legal terminology, a true interpretation and discussion of the trainee narrations would have proved difficult.

Although the researcher did not carry out a review of the literature prior to entering the field for data collection it must be acknowledged that the researcher's experience within the field of Library and Information Science will have informed the analysis of the findings. Heath and Cowley (2004:143) suggest that no-one would claim to enter the field completely free from the influence of past experience and reading. In this instance the researcher's past experience and reading will also have had some influence on analysis.

A constructivist approach to inquiry resulted in a massive amount of data being collected that was not used in the final presentation of the findings. However, this data can be used to further explore and to expand upon the findings of this research as outlined in 5.8.

The coding process was carried out manually. The time it takes to do this cannot be underestimated, it was extremely time-consuming. However, overall this was considered to be worth the time and effort for this research as it suited the preference of the researcher and, more importantly, the approach achieved the desired results. Those wishing to embark on a constructivist approach to inquiry may want to consider available software packages.

As explored within the methodology section, the coding process within this research was also extremely 'messy' and required several attempts at coding and recoding. Furthermore, once having achieved an initial classification of codes through the use of Strauss and Corbin's (1998) axial coding technique, it was discovered that this coding did not really help in that the properties of the categories did not feel right, nor did they seem to fully reflect the data, or the potential inter-relationships within the data. This led to a need to re-consider the

mass of data collected and its analysis. Out of a total of twenty one interviews across twelve trainees, with some 125,086 words, the decision was made to identify a more focused sample for analysis. From this, two seats, Property and Commercial Litigation, were identified as providing the context to characterise the behaviour of six trainees, four trainees in the context of each individual seat, with two of these trainees being present in both seats. It was felt that this offered the opportunity to carry out a cross trainee and a cross-seat analysis, and to allow multiple realities to emerge within the context of each seat of training. It was through the then re-reading of the selected transcripts and through a re-consideration of the axial coding that led to the identification of six broad key categories or selective codes to aid in the analysis. However, the messiness did not end there. The resultant analysis was still rather lengthy and suggested a need for methods that both enabled the bringing of key salient points to the fore whilst reducing the word count. It was through the successive writing of memos, as recommended by Charmaz, (2006), that enabled key categories, sub categories and shaping factors to truly emerge.

There are also a number of limitations that need to be acknowledged in terms of this inquiry. A constructivist approach requires that the research is undertaken within the natural setting (Lincoln & Guba, 1985:39). Due to the confidential nature of the work of the trainees, this research was undertaken within their macro environment, the firm, rather than their micro environment, the seat of training. This meant that there was no potential to observe the trainees within their immediate context, their seat of training. It is acknowledged that this restriction of access to the trainees' micro environment is likely to have influenced, not only what could be discovered, but also the resultant understandings of the realities of the trainees themselves.

A further limitation was the use of a single data collection tool. Prior knowledge of the workings of law firms suggested to the researcher that there would be no possibility of the trainees taking the time to, for example, complete diaries of their work and their thoughts on that work (indeed, the findings of this research do illustrate that the trainees identified themselves as being too busy to have time to write up their own work). Despite the considered success of the chosen

method in providing a rich characterisation of their behaviour, it is acknowledged that this is a limitation and that the additional use of tools such as diaries could have enriched the chosen method and further aided credibility.

Member checking was considered a valuable tool in establishing credibility, however, it should be noted that despite two trainees feeding back their thoughts on the penultimate analysis of this research, it is acknowledged that it would have been useful to have been able to go back into the field to gather opinions on the findings from a larger number of trainees. However, due to the time constraints of the trainees and their change in circumstances, now being qualified, this was not possible.

The findings of this research are time and context bound, and therefore, only pertains to the trainees selected for this study, at the time of the study and within the context of their seat of training. However, in constructivist inquiry, the goal is to allow for transferability of the findings rather than wholesale generalisation of those findings (Pickard & Dixon, 2004:8). Through the use of memos, thick descriptions have been produced in this study which could be transferred to other situations based upon their contextual applicability.

5.8 Opportunities for further research

5.8.1 Potential further research using data collected as part of this research

As this research focused on two seats of training there is the potential to consider the findings and the resultant model in relation to the other seats of training undertaken by the trainees in this sample, for example, in relation to Business Services.

Leckie, Pettigrew and Sylvain (1996) suggest that some legal practice areas, such as property, are suggested as not requiring the same amount of research or supporting documentation as other areas that are thought to be more labour intensive and expensive such as taxation. This was not evident from the research presented in this thesis and a further examination of the data could be carried out

with a view to exploring this further in relation to all legal practice areas covered. Furthermore, research, as defined in the literature, was found to be too narrow in scope in reflecting the information seeking behaviour of the trainees in relation to tasks. A consideration of other legal practice areas could prove useful in supporting or refuting this claim.

There is also the potential to go back to the data and to consider and expand upon the model in relation to those trainees not selected for the sample.

As this research focussed on a cross theme analysis there is the potential to focus on an individual trainee; to identify if and how their knowledge behaviour changes as they progress through their training (and potentially to go back into the field to see if there are any differences now that they are qualified).

If other research was undertaken in other law firms, this research could form part of the jig-saw that portrays a more holistic picture of a wider.

5.8.2 Through a consideration of the literature: the potential for further research

Jarvelin and Ingwersen (2004:11) called for more empirical task based research. Although the findings of this research do illustrate that in attempting to discover more about the information behaviour of trainee solicitors, through exploring what it is that they 'do' as part of their day-to-day work, that not only do individual tasks vary in their requirements for information and in the typical resources used, as suggested by Jarvelin and Ingwersen (2004), but that context, in terms of the legal practice area within which they were situated in, and situation, whether they were, for example, 'sitting' with a supervisor, or working as part of a team, were identified as influential. However, this research only provides an overview of a selection of tasks, as remembered and constructed by a small sample of six trainees, within the context of specific legal practice areas, at a specific stage in their career and point in time. As the trainees are learners, their approach to tasks, the contexts and situations that they find themselves in, and their use of resources, is likely to change as they become more experienced in the

practice of law. This was illustrated to a certain extent where the trainees were identified, as a result of increased experience, to be more confident, and in some instances, to know what to do without an apparent need to seek further information. However, in order to gain a more complete picture of the trainees' behaviour, and how experience influences that behaviour, suggests a need to carry out a more longitudinal study that examines not only their behaviour as a trainee but further examines their practice and behaviour as they move through their career, and within the context of a defined area of practice, for example, through their work within their qualifying seat.

Having said that, it is clear from the findings of this research that taking a more task-based approach to information behaviour research does provide the reader with a richer indication of the influences that shape that behaviour, and not just those factors that influence information seeking behaviour traditionally viewed as taking place between the task and the information source (Jarvelin and Ingwersen, 2004). According to Ford (2004:183) 'there is increasing recognition that in order to understand information seeking (in general) we need to understand the context in which it takes place and which to some extent shapes it'. There is scope therefore, for researchers in information behaviour, in order to understand more fully the contexts which shape behaviour, to consider taking a more task-based approach, particularly in relation to professionals and their practices. Furthermore, Jarvelin and Ingwersen's (2004:7) Augmenting Task Performance framework could prove useful as a starting point as not only does it consider information seeking behaviour but it highlights the additional influences of knowledge, education and training, the acquisition and creation of knowledge, methodologies, social influences, and memory, all found to have some influence on the behaviour of the trainees within this research. However, there is a need to go further than this framework suggests particularly if one is interested in taking a more holistic approach to information behaviour rather than aspects of that behaviour such as seeking. The process, as illustrated in this model appears to stop at the seeking of information from resources such as people, databases, documents etc and does not consider what happens next, that is the processing and use made of that information acquired. It is likely that there will be potential loops back to further work tasks in situation, knowledge, use of sources,

methodologies and so on throughout the process of seeking and the then use made of information and knowledge.

Leckie, Pettigrew and Sylvain (1996) identified roles as being a key indicator of the types of tasks that professionals could undertake. However, this research has identified, in relation to trainee solicitors, that tasks could also require differing roles to be enacted. Roles, in addition to tasks, would potentially be a useful addition to Jarvelin and Ingwersen's (2004:7) Augmenting Task Performance framework.

Within the literature surrounding learning Billett (Kerka, 1997:1) suggests that 'learners actively construct knowledge by integrating new *information* and experiences into what they have previously come to understand, revising and reinterpreting old knowledge in order to reconcile it with the new'. Within the literature surrounding knowledge management, Davenport et al (Gottschalk, 1999: 203) suggest that 'knowledge is *information* combined with experience, context, interpretation, and reflection'. There is the clear potential, therefore, for the findings of this and other research studies within information behaviour, and particularly in relation to user behaviour, to inform research within knowledge management as to potential influences surrounding the capturing and sharing of knowledge. As organisations only learn through individuals (Senge, 1990:139) and as learning suggests the reconstructing of knowledge based on new information, then studies that explore how individuals identify, seek, process and use information is of potential relevance to an exploration of understanding knowledge; finding knowledge; distribution of knowledge; forms of knowledge; renewal of knowledge; building knowledge; availability of knowledge and application of knowledge.

Jarvelin and Ingwersen (2004:2) suggested that there is limited empirical research 'that relates characteristics of contexts and situations to characteristics of tasks, actors, information, seeking processes, sources, systems and use of information'. An attempt has been made in this research to relate the characteristics of the contexts and situations to the characteristics of tasks, the trainees, and their information behaviour in this research. However, what did not

emerge through the characterisations was any real indication of the importance of systems in meeting need. Kuhlthau (Kuhlthau & Tama, 2001) highlighted lawyers' frustrations and reservations concerning systems and their perceived ability to meet their needs. Conversely, in this research, some trainees were clearly impressed by the databases that they had access to and the results they retrieved. The only real frustration identified for some was in terms of knowing how to search the differing resources from their desktop. This is potentially indicative of the demographic differences between this study's sample group and that of Kuhlthau's. This study's sample were trainees, not long out of education and therefore, more likely to be familiar with databases, although clearly, as indicated by the findings, not necessarily familiar with search techniques. They are also at an earlier stage in their career, whereas Kuhlthau's sample were qualified and at a later stage in their career. It could also be indicative of the level or perceived complexity of the tasks undertaken. The level of tasks allocated and, or, the level of involvement of the trainees in tasks, is not likely to be to the same extent as that experienced by more qualified solicitors. Furthermore, the tasks undertaken by the trainees in this research were interpreted as having the potential to be more complex, based on, for example, the trainees being new to their work and their perceived level of difficulty, the need for discussion and tactics. However, Kuhlthau's (2004:179) research suggests the lawyers as being able to distinguish between complex and routine tasks. Further research that takes a longitudinal approach would be useful in considering demographic changes and satisfaction with current systems, and in relation to any changes in perceptions surrounding task complexity.

Stein (1998:1) suggests, 'that knowledge is acquired situationally and transfers only to similar situations'. The findings of this research highlight that the trainees were not always able to translate, or relate, what they had learned whilst in education to legal practice. This would suggest that there is a need for research that explores reasons for this anomaly, for example, through a consideration of the types of learning experiences provided at University and on the Legal Practice course, and then comparing these to experiences in legal practice.

5.9 Table 3. Theoretical Propositions and Solutions

Knowledge Behaviour and Knowledge Development of Trainee Solicitors	
Theoretical Propositions	Points for Consideration / Practical Solutions
5.2 Knowledge Behaviour <i>5.2.1 'Information and knowledge cannot be seen in isolation of each other when it comes to task related behaviour. This resultant complexity of behaviour is better expressed through use of the overarching phrase of knowledge behaviour'</i>	<p>Highlights that information and knowledge were found to be inextricably linked when it came to task related behaviour, and that in working towards achieving an understanding of an individual's approach to tasks the firm should consider know-how needs in addition to information needs.</p>
5.3 Knowledge Needs 5.3.1 Task Environment Theoretical Propositions <i>5.3.1a. 'Tasks can be partial or more complete in nature resulting in partial or more complete learning experiences'</i>	<p>5.3.1a Through acknowledging that the potential for learning can be dependent upon the level of involvement in a task, the firm can take this into account within its continuing professional development (CPD) programme. On becoming qualified or trained in an area where only partial learning might have been achieved during training, the firm could offer staff an increased programme of CPD.</p>
<i>5.3.1b. 'Affordance of opportunities shapes the potential for learning'</i>	<p>5.3.1b The firm can increase the potential for knowledge development of its trainees through the identification and utilisation of opportunities that afford the trainees the possibility of becoming more involved in, or to experience an increased range of, tasks that require differing information and know-how.</p>

<p>5.3.1c 'Research underpins tasks and roles'</p> <p>5.3.1d 'Roles can indicate tasks but tasks can indicate further roles to be played and drive knowledge needs and learning experiences. Tasks that require a range of activities and differing roles to be carried out will result in a broader learning experience.'</p> <p>5.3.1e 'Knowledge development is dependent upon context and the individual's accumulation of experiential know-how in context. Knowledge</p>	<p>5.3.1c This would suggest to the firm and to legal educators that legal research is broader than searching primary and secondary legal literature, and that there is a need to develop a more holistic approach to legal research training. Rather than teaching or seeing legal research skills as being separate from skills such as advocacy or drafting, there is a need to more explicitly link legal practice areas under study with a need for research, thereby increasing the potential to impress upon the trainees that research underpins and compliments all aspects of legal work.</p> <p>5.3.1d The role of the trainees is as learner, however, depending on the type and size of task they are given to undertake, this can result in a range of further roles needing to be enacted, for example, that of drafter, advocate. Furthermore, the size of task can also suggest a need for a range of differing task-related activities to be carried out. As a result, through involving the trainees in more complete task-based exercises, such as the buying of property, as opposed to partial task-based exercises, for example, correspondence or drafting, there is the potential for the trainees to experience a range of roles and legal practice activities, enabling the trainees a broader learning experience.</p> <p>5.3.1e Experience, and confidence gained through experience, enabled the trainees to become more competent learners, able to apply their acquired</p>
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<p><i>development as a result of increased experiential know-how better enables transferability of that know-how to other tasks, however, this transferability can be context bound'</i></p>	<p>knowledge across file matters. However, much of this experiential know-how was identified as only transferable within the same seat within which it was acquired; only certain elements such as dealing with clients and colleagues were identified by the trainees as being transferable across differing seats of training. This highlights to the firm the importance of context in the development of a trainees' know-how and how this know-how is built up over time through further experience in context. Through acknowledging how context and experiential know-how shape a trainees' knowledge development the firm is better placed to understand;</p> <ul style="list-style-type: none"> • how the types of tasks allocated to the trainees in any seat of training and the time spent in each seat of training might not be sufficient in themselves in affording the trainees enough experience in context to fully develop their knowledge of, and confidence in, matters pertaining to that seat, • that confidence is a contributory factor in a perceived ability to undertake tasks, familiar and unfamiliar, • that for confidence to develop there is a need for increased experience in context, • what they can realistically expect a trainee to know on completion of a seat of training and that on qualifying into the firm they will still require further learning in context.
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<p>5.3.1f. <i>'Experience gained whilst in education does not necessarily translate into practice and requires further learning in situ'</i></p> <p>5.3.1g <i>'Tasks can be more complex than they might initially appear, suggesting a need not only for information and know-how, but a need for further learning, over time, through practice, and in context.'</i></p>	<p>Linked to sections 5.3.1a, 5.3.1b and 5.3.1d above, CPD can be used to further knowledge on completion of training, and an increase in opportunities to undertake more complete task-based exercises can afford the trainees a broader experience whilst in training. Both of these solutions are likely to increase confidence as they provide the trainees with an increase in experience.</p> <p>5.3.1f Acknowledging that what has been learned at University is not necessarily seen as directly transferable into practice has implications for the firm's training programme. By not assuming that the trainees are familiar with legal practice areas provides the firm with the opportunity to design a programme that does not assume prior knowledge and that incorporates the skills and knowledge that they would want their trainees to have on qualifying, in addition to meeting the needs of the Law Society requirements. Through taking this approach all trainees are likely to feel more confident, realising that where they are perhaps more unfamiliar with some legal practice areas they are not going to be at a disadvantage. Furthermore, through feeling more confident they are likely to feel more able to tackle tasks, familiar and unfamiliar.</p> <p>5.3.1g Tasks can be perceived as more complex where the trainees need information and know-how to be able to enact several roles; as a result of being unfamiliar with the legal practice area; a need to develop skills in</p>
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<p>5.3.2 Guidance</p> <p><i>5.3.2a 'Initial guidance on how to approach tasks can both inhibit and encourage effectiveness and efficiency in terms of individual and organisational learning'</i></p> <p><i>5.3.2b 'Where guidance on tasks is specific in nature there is the potential for the more immediate transference of knowledge. Where guidance is more general in nature, no knowledge is transferred, but there is still the potential for knowledge to develop through the tackling of tasks.'</i></p>	<p>tactics and negotiation; and to make judgements on situations. Through acknowledging that these skills are developed over time, through practice, and through discussion in context, that the trainees become more confident with increased familiarity, the firm is in a better position to consider methods of enabling the trainees to develop, and to practice these skills, and to build these into their training programme.</p> <p>5.3.2a Acknowledging that guidance can improve the behaviour and capabilities of the trainees so that the firm is more quickly able to efficiently and effectively respond to the needs of its clients suggests that guidance as to what to do should be explicit. However, accepting that the trainees also learn how to learn, often by trying to find their own way around tasks, suggests that guidance should not be so specific. Providing a balance of opportunities is a likely solution with initial guidance on ideas as to how to approach the task in hand being provided, thereby promoting confidence in the trainee, but with the trainee then given time to explore the avenues offered, and to learn through this exploration.</p> <p>5.3.2b Linked to 5.3.2a above, for specific guidance to be given to the trainees as to any potential avenues to follow, it would appear that there is also a need to ensure that the solicitors are themselves aware of the specifics of these potential avenues, or a need to ensure that the solicitors spend time preparing some guidance to be given to the trainees. This might not seem very practical to solicitors who are extremely busy, but the benefits of how</p>
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<p>5.3.3 Feedback</p> <p><i>5.3.3a 'Feedback, where constructive and consistently part of the learning process, becomes a key enabler of individual and organisational learning. A lack of feedback inhibits learning and the transferability of knowledge'</i></p> <p>5.3.4 Affective Factors</p> <p><i>5.3.4a 'Uncertainty is a key affective factor in relation to knowledge needs.'</i></p> <p><i>5.3.4b 'Confidence as a result of prior experience, of feeling optimistic, of increased self-awareness and self-assuredness, can alleviate feelings of uncertainty'</i></p>	<p>this would help the trainees' learning, and how this learning ultimately benefits them and the organisation, need to be weighed against time lost in the preparation of guidance.</p> <p>5.3.3a Feedback is crucial to learning and the firm needs to introduce a policy of providing feedback on all work undertaken. Feedback enables the trainees to reflect upon, and to learn from, their own work, and to learn from the experience of others. Feedback from supervising solicitors to those who are responsible for the training programme can also be used to identify any common mistakes being made by the trainees, to identify areas that, for example, require further practice. Without feedback there is less scope for reflection to inform future learning experiences, on the part of the solicitors or the trainees.</p> <p>5.3.4a Uncertainty is a key affective factor not only in relation to a cognitive gap signifying an information need but in relation to a gap in know-how signifying a need to know what to do and how to do it. Through an understanding of what alleviates feelings of uncertainty the firm will be in a better position to consider methods of enabling the trainees to more quickly move from uncertainty to increased certainty in the performing of tasks.</p> <p>5.3.4b Confidence as a result of prior experiences within a legal practice area can be said to lead to a more focussed perspective of a problem at the task initiation stage. This would suggest to firms that the more experience a</p>
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<p>5.4 Knowledge Acquisition and Knowledge Resources</p> <p><i>5.4.1 Knowledge seeking</i></p> <p><i>5.4.1a 'Knowledge seeking, and by implication knowledge development as a result of knowledge seeking, is influenced by time spent in education and in the workplace but is further shaped by a range of variables surrounding the perceptions held of resources'</i></p>	<p>trainee gains within a particular practice area the more able they will feel to tackle unfamiliar tasks.</p> <p>Encouraging feelings of optimism through ensuring that the trainees are aware that whatever they find in relation to a task will be of value could result in the trainees feeling increased confidence and certainty.</p> <p>Uncertainty in relation to not knowing what is acceptable behaviour in relation to the number of tasks allocated to a trainee, and how that trainee would be perceived if they were to speak out suggests that the training programme needs to consider how the culture of the organisation or department within the organisation can enable or inhibit the trainees' development. And to consider methods of encouraging the trainees to be more assertive and aware of the implications of not raising any workload concerns.</p> <p>5.4.1a Perceptions or mental models held of resources, and, or, their content, were found to influence the trainees' approach to knowledge seeking. Factors identified included knowledge of resources, familiarity, accessibility, trustworthiness and success, time-saved, currency and level of information, referential memory, ability to express need, manipulability and acceptability. Through an understanding of the key factors that together shape the trainees' choice and use of resources in the knowledge seeking process the firm is better informed to be able to identify, select, and promote knowledge resources to meet these needs, and to provide training and systems that encourage best use to be made of the firm's knowledge resources.</p>
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<p>5.4.1b <i>'Cultivating a knowledge seeking culture where 'learning by doing' and 'asking' are encouraged and supported, where staff are friendly and approachable, and where knowledge and with whom it resides is visible and accessible, increases the potential for knowledge sharing and knowledge development'</i></p>	<p>5.4.1b Methods that could be used by the firm to foster a more friendly and approachable culture are seminars or activities that focus on customer care and public relations for all staff.</p> <p>Solicitors are not trained as teachers and as such they are not necessarily going to be aware of how people learn. There is the potential therefore, for example, to introduce sessions for those who are given the task of mentoring trainees that afford them the opportunity to explore and understand differing learning preferences.</p> <p>Knowledge and expertise can be made more visible through the development of products that enable staff to identify where knowledge and expertise resides, for example an experts database accessible via the desktop.</p> <p>Encouraging networking and the sharing of knowledge as a result of that networking is a more informal method of increasing knowledge visibility.</p>
<p>5.4.1c <i>'Having an awareness of knowledge resources from University and the workplace is insufficient in itself in encouraging use, or indeed for knowing how to use resources. However, knowing what resources are available when combined with increased familiarity in their use can result in a more selective and evaluative approach to knowledge seeking and resource use'</i></p>	<p>5.4.1c This suggests that ensuring staff have an awareness of what resources are available to them in the firm is insufficient in itself in encouraging or enabling use. The firm needs to consider methods and tools that better enable the trainees to make a decision as to which resource would best serve their needs, and to provide guidance on accessing, searching, and evaluating resources at point of need.</p>

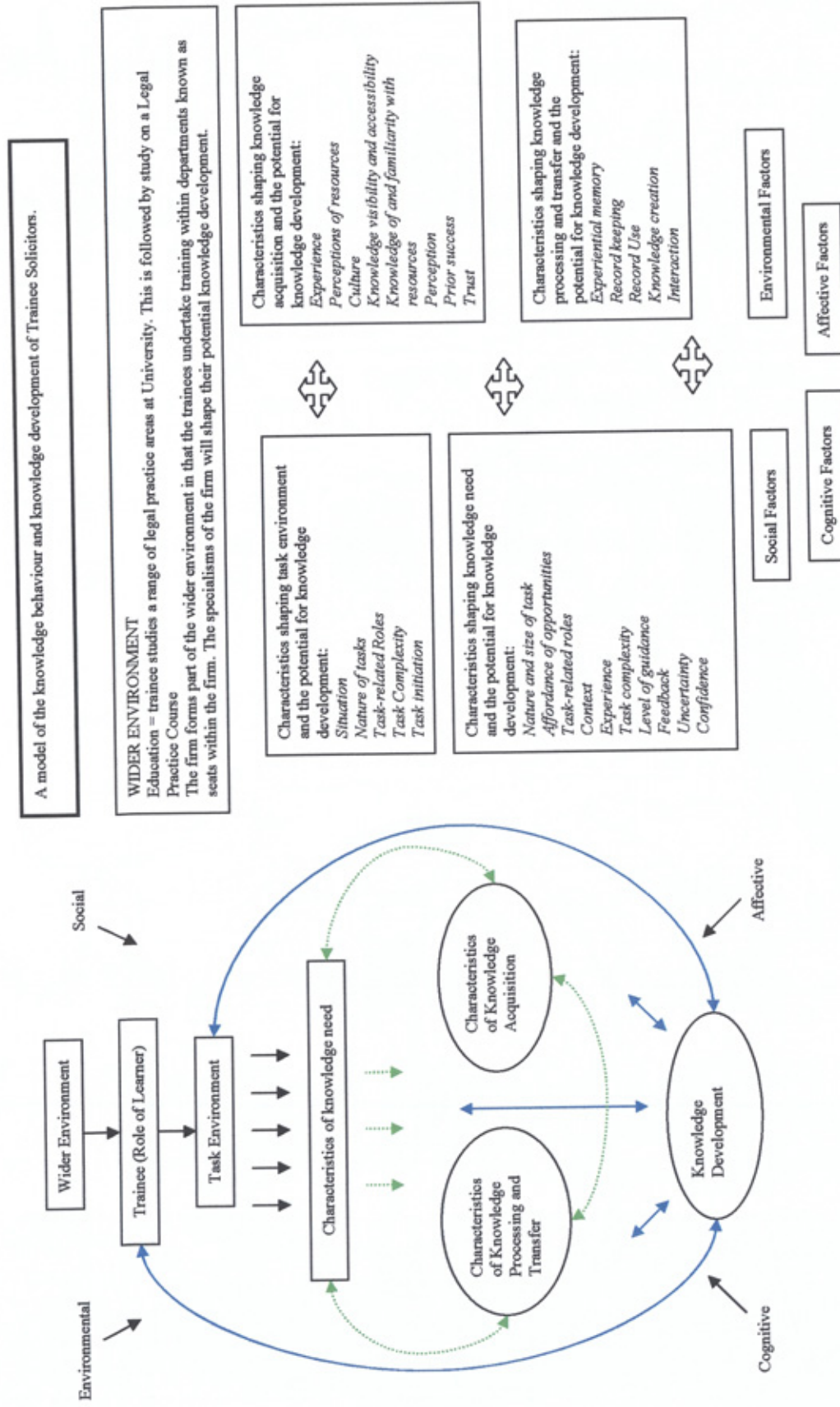
<p>5.4.2 Affective Factors</p> <p>5.4.2a <i>'Perception is a key affective factor in the knowledge seeking process'</i></p> <p>5.4.2b <i>'A perception that it is unacceptable to spend time browsing resources suggests a need for explicit guidance at point of task allocation'</i></p> <p>5.4.2c <i>'Resources that are perceived to hold the required information, or to be current, or easily accessed and manipulated, are more likely to be re-used. Prior success in the use of a resource will also encourage re-use'</i></p> <p>5.4.2d <i>'Trust is a key affective factor in the knowledge seeking process but is often insufficient a reason in itself for selecting a knowledge resource and is linked to personality, perception, responsibility, an ability to express need, the need for a shared language, tacit insight, and authority'</i></p>	<p>5.4.2.a Perception was identified as a key affective factor in the knowledge seeking process and was found to be linked to time and acceptability, prior success, content, accessibility, currency, and manipulability.</p> <p>5.4.2b Linked to 5.3.2 above, in order to ensure more efficient and effective use of resources and time, the firm needs to provide more explicit guidance as to specifically which resources would potentially be suitable at point of task allocation.</p> <p>5.4.2c Through understanding the factors that shape the trainees' use of resources the firm is better informed as to the evaluation criteria that could be used when reviewing resources held and for purchase, in considering format and how resources should be made available, and in designing training and guidance on resources held or newly purchased.</p> <p>5.4.2d Trust enables learning and knowledge sharing and through understanding how trust can shape a trainees' approach to tasks the firm is better enabled to take measures to promote a trusting culture and is linked to the solutions proposed in 5.4.1b above. For example, the trainees were identified as more likely to approach those whom they perceived to be friendly and approachable, suggesting an element of trust in the willingness of those approached to share their knowledge with the trainees. However, it is</p>
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<p>5.5 Knowledge Transfer Theoretical Propositions</p> <p>5.5.1 Knowledge Processing, Creation and Use</p> <p><i>5.5.1a 'Increased experience and confidence potentially results in a belief that one will be able to bring to bear, at point of need, an experiential memory of prior work tasks rather than a need to refer to past notes or copies of work undertaken. However, keeping and using copies of past work examples can increase learning and reflection opportunities, and procedural note-keeping is a useful coping strategy, potentially alleviating any immediate feelings of stress in staff new to tasks. Furthermore, any copies made of the knowledge acquired as a result of working on tasks are potential examples of the knowledge created as a result of these tasks, and can be used as future examples of best practice'</i></p>	<p>important for the firm to recognise that use of staff as knowledge resources is not necessarily down to issues of trust but can be influenced by a need for a shared language, to feel able to share one's need with others. Furthermore, often the trainees were found to only know what they needed when they saw it.</p> <p>5.5.1a Through acknowledging the value of learning from past work experiences the firm is in a position to encourage its staff to keep and to use example copies of past work. However, where staff are more experienced there is an increased potential for them to rely on an experiential memory rather than make use of copies made of past work. In these instances the firm could consider encouraging experienced staff where they come across something new to keep records of solutions. Furthermore, to enable collective as opposed to purely individual learning there is then the potential for the firm to gather these records and to make them available to others via, for example, a central knowledge collection.</p> <p>Through acknowledging why the trainees keep notes on tasks, and their potential influence in enabling coping, and in alleviating more immediate feelings of stress, this can be encouraged as not only accepted practice by all but then be used to work towards identifying best practice. Furthermore, keeping copies of solution memos, as described above, does not necessarily provide us with an overview of all the stages gone through when working towards task completion as these memos tend to be in a format acceptable to</p>
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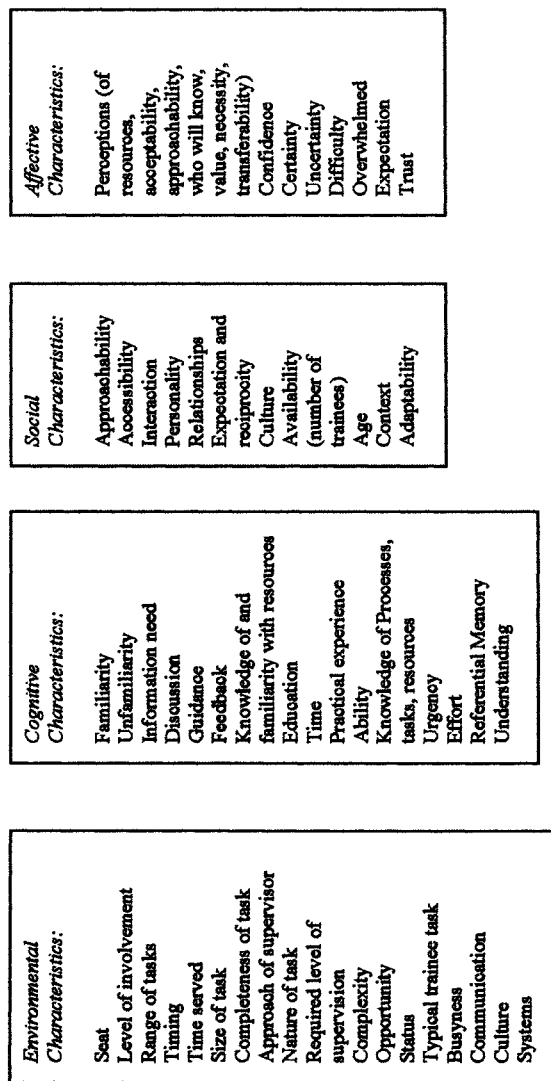
<p><i>5.5.1b 'The creation and use of precedents enables knowledge transfer and knowledge development. Where use is made of a shared precedent system there is the potential for the individual and the organisation to learn, however this system would need to be kept up-to-date'</i></p>	<p>the person for whom the work was undertaken. By gathering and using notes of the stages worked through, best practices can be better identified. These examples of best practice can then be made available for others to access and use as required via a central knowledge system.</p> <p>Examples of both types of records can be introduced and used in training and induction sessions to the firm as a whole and to individual departments.</p> <p>5.5.1b Precedents are examples of knowledge creation and where variations of worked precedents are stored on a central system, such as a precedent bank, then there is the potential to share this knowledge across the firm. Individuals can access and learn from work that has been previously used and created by solicitors within the firm. They can manipulate that work to suit their individual task needs, ultimately adding any new, manipulated precedent versions to the precedent bank for future learning, use and adaptation by others in the firm. Importantly it also reduces the need for duplication of effort, thereby saving time and effort. Ensuring that all solicitors and trainees update the central precedent bank with new and reworked precedents would enable all staff to access this in-house created bank of knowledge, thereby furthering the potential for knowledge sharing , knowledge development and further knowledge creation.</p>
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<p>5.5.2 Interaction</p> <p>5.5.2a <i>'Interaction is a primary form of knowledge sharing and underpins knowledge need, and knowledge seeking'</i></p> <p>5.5.2b <i>'Interaction through team work, observation, listening, and discussion encourages knowledge sharing and learning. However, there is still a need to practice what one has learned to enable knowledge development'</i></p>	<p>5.5.2b This would suggest to the firm that yes there is a need to further knowledge development through encouraging interaction through discussion, listening and observing, but that the trainees need to then be able to try out what they have identified for themselves, to put into practice what they have learned from listening, observing and discussing. The firm should recognise that this is different from being allocated a task as part of a team, where the trainee is expected to work on the task and to seek guidance as appropriate. An example that helps illustrate the difference is where one trainee, being told how to go about interviewing clients, then observing and listening to how others carried out interviews, and finally, practicing interviewing themselves, enabled that trainee to better develop interviewing knowledge and skills.</p>
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5.10 A model of the knowledge behaviour and knowledge development of Trainee Solicitors



5.10 A model of the knowledge behaviour and knowledge development of Trainee
Solitoirs: shaping variable characteristics



References

- Bandura, A. (1986) *Social foundations of thought and action*, Prentice-Hall.
- Beijerse, R. P. (1999) 'Questions in knowledge management: defining and conceptualising a phenomenon', *Journal of Knowledge Management*, 3 (2), pp. 94-109.
- Boussouara, M. and Deakins, D. (2000) 'Trust and the acquisition of knowledge from non-executive directors by high technology entrepreneurs', *International Journal of Entrepreneurial Behaviour & Research*, 6 (4), pp. 204-226.
- Casey, A. (2005) 'Enhancing individual and organisational learning: a sociological model', *Management Learning*, 36 (2), pp. 131 – 147.
- Charmaz, K. (2006) *Constructing grounded theory: a practical guide through qualitative analysis*. Sage Publications.
- Doolittle, P. E. (1999) 'Integrating constructivism & cognitivism', [Available at: <http://edpsychserver.ed.vt.edu/research/icc.html>] (Accessed 17th March 2007)
- du Troit, A. (2003) 'Knowledge: a sense making process shared through narrative', *Journal of Knowledge Management*, 7 (3) pp. 27-37.
- Ford, N. (2004) 'Towards a model of learning for educational informatics', *Journal of Documentation*, 60 (2), pp. 183-225.
- Gottschalk, P. (1999) 'Knowledge management in the professions: lessons learned from Norwegian Law firms', *Journal of Knowledge Management*, 3 (3), pp. 203-211.
- Heath, H. & Cowley, S. (2004) 'Developing a grounded theory approach: a comparison of Glaser and Strauss', *International Journal of Nursing Studies*, 41, pp. 141-150.

- Hildreth, P.J. and Kimble, C. (2002) 'The duality of knowledge', *Information Research*, 8 (1), paper 142. [Available at: <http://InformationR.net/ir/8-1/paper142.html>] (Accessed 8th August 2005).
- Holloway, W. & Jefferson, T. (2000) *Doing qualitative research differently: free association, narrative and the interview method*. Sage Publications.
- Honey, P. and Mumford, A. (1992) *The manual of learning styles*, Peter Honey.
- Jarvelin, K. and Ingwersen, P. (2004) 'Information seeking research needs extension towards tasks and technology', *Information Research*, 10 (1) paper 212 [Available at: <http://InformationR.net/ir/10-1/paper212.html>] (Accessed 15th March 2007).
- Kerka, S. (1998) 'New perspectives on mentoring', *ERIC Digest* [Available at: <http://www.ericdigests.org/1998-3/mentoring.html>] (Accessed 17th March 2007).
- Kerka, S. (1997) 'Constructivism, workplace learning and vocational education', *ERIC Digest* [Available at: www.ericdigests.org/1998-1/learning.htm] (Accessed 17th March 2007).
- Kolb, D. A. (1984) *Experiential Learning*, Prentice Hall.
- Kuhlthau, C. C. (2004) *Seeking meaning: a process approach to library and information services*. 2nd ed. Libraries Unlimited.
- Kuhlthau, C. C. and Tama, S. L. (2001) Information search process of lawyers: a call for 'just for me' information services. *Journal of Documentation* vol. 57 (1) pp.25-43.
- Law Society (2005) *Training trainee solicitors; the Law Society requirements*. The Law Society.

Leckie, G. J., Pettigrew, K. E. and Sylvain, C. (1996) 'Modelling the information seeking of professionals: a general model derived from research on engineers, health care professionals and lawyers', *Library Quarterly*, 66 (2), pp.161-193.

Lewis, D. (2002) 'Five years on – the organisational culture saga revisited', *Leadership and Organisation Development Journal*, 23 (5), pp. 280-287.

Lincoln, Y. S. and Guba, E. G. (1985) *Naturalistic inquiry*. Sage Publications.

McDermott, R. and O'Dell, C. (2001) 'Overcoming cultural barriers to sharing knowledge', *Journal of Knowledge Management*, 5 (1), pp. 76-85.

Marchand, D. A. (1998) 'Competing with intellectual capital', in: von Krogh, G, Roos, J and Kleine, D (eds) *Knowing in firms: understanding, managing and measuring knowledge*. Sage Publications, pp. 253 – 268.

O'Donoghue, J. and Maguire, T. (2005) 'The individual learner, employability and the workplace', *Journal of European industrial Training*, 29 (6), pp. 436 – 446.

Pickard, A. J. (2002) *Access to electronic information resources: their role in the provision of learning opportunities for young people. A constructivist enquiry*. PhD University of Northumbria at Newcastle.

Pickard, A. & Dixon, P. (2004) 'The applicability of constructivist user studies: How can constructivist inquiry inform service providers and systems designers?' *Information Research*, 9 (3) paper 175, [Available at: <http://InformationR.net/ir/9-3/paper175.html/>] (Accessed: 8th August 2005).

Rowbotham, D. (2004) 'Developing competent learners: fine tuning the pursuit of effective learning', *Development and Learning in Organisations*, 18 (4), pp. 25-27.

Senge, P. (1990) *The fifth discipline: the art and practice of the learning organisation*. Currency.

Stein, D. (1998) 'Situating learning', *ERIC Digest*, 3 [Available at: <http://www.ericdigests.org/1998-3/adult-education.html>] (Accessed 14th March 2007).

Strauss, A. & Corbin, J. (1998) *Basics of qualitative research: techniques and procedures for developing grounded theory*. 2nd ed. Sage Publications.

Wagner, B. A. (2003) 'Learning and knowledge transfer in partnering: an empirical case study', *Journal of Knowledge Management*, 7 (2), pp. 97-113.

Wilkinson, M. A. (2001) 'Information sources used by lawyers in problem solving: an empirical exploration', *Library and Information Science Research*, 23, pp. 257-276.

Wilson, T. D. (1981) On user studies and information needs. *Journal of Documentation* Vol.37 (1) pp.3-15.

Wilson, T. D. and Walsh, C. (1996) *Information behaviour: an interdisciplinary perspective. A review of the literature*. British Library Research and Innovation Centre. (British Library Research and Innovation Report no. 10).

Yoon, K. & Nilan, M. S. (1999) 'Toward a reconceptualization of information seeking research: focus on exchange of meaning', *Information Processing and Management*, 35, pp. 871-890.

BIBLIOGRAPHY

Al-Hawamdeh, S. (2003) *Knowledge management: cultivating knowledge professionals*. Chandos.

Allavi, M. and Leidner, D. E. (1999) 'Knowledge management systems: issues, challenges, benefits', *Communications of AIS*, 1 (7), pp. 2-41.

Appleton, J. (1997) 'Constructivism: a naturalistic methodology for nursing inquiry', *Advances in Nursing Science*, 20 (2), pp. 13-22.

Assoudani, R. H. (2005) 'Catching the chameleon: understanding the elusive term 'knowledge'', *Journal of Knowledge Management*, 9 (2), pp. 31-44.

Baker, A. C., Jensen, P. J. and Kolb, D. A. (2005) 'Conversation as experiential learning', *Management Learning*, 36 (4), pp. 411 – 427.

Bandura, A. (2002) 'Social, cognitive theory in cultural context', *Applied Psychology: an International Review*, 51 (2), pp. 269 – 290.

Bandura, A. (1986) *Social foundations of thought and action*, Prentice-Hall.

Bates, J. (2004) 'Use of narrative interviewing in everyday information behaviour research', *Library and Information Science Research*, 26, pp. 15-28.

Bechky, B. A. (2003) 'Sharing meaning across occupational communities: the transformation of understanding on the shop floor', *Organisation Science*, 14 (3), pp. 312-330.

Beckett, A. J., Wainwright, C. E. R. and Bance, D. (2000). 'Knowledge management: strategy or software?', *Management Decision*, 38 (9), pp. 601-606.

Beckman, T. J. (1999) 'The current state of knowledge management', in: Liebowitz, J. (ed) *Knowledge management handbook*. CRC Press.

- Beijerse, R. P. (1999) 'Questions in knowledge management: defining and conceptualising a phenomenon', *Journal of Knowledge Management*, 3 (2), pp. 94-109.
- Boussouara, M. and Deakins, D. (2000) 'Trust and the acquisition of knowledge from non-executive directors by high technology entrepreneurs', *International Journal of Entrepreneurial Behaviour & Research*, 6 (4), pp. 204-226.
- Bouthillier, F. and Sherer, K. (2002) 'Understanding knowledge management and information management: the need for an empirical perspective', *Information Research*, 8 (1), paper 141, [Available at: <http://InformationR.net/ir/8-1/paper141.html>] (Accessed 8th August 2005).
- Bradley, J. (1993) 'Methodological issues and practices in qualitative research', *Library Quarterly*, 63 (4), pp. 431-449.
- Brown, B. L. (1999) 'Self-efficacy beliefs and career development', *ERIC Digest* 205 [Available at: <http://www.ericdigests.org/1999-4/self.htm>] (Accessed 17th March 2007).
- Bryman, A. (1989) *Research methods and organisation studies*. Routledge.
- Burnes, B, Cooper, C. and West, P. (2003) 'Organisational learning: the new management paradigm?' *Management Decision*, 41 (5), pp. 452-464.
- Burnett, K. and McKinley, E. G. 'Modelling information seeking', *Interacting with Computers*, 10 (3), pp. 285-302.
- Case, D. O. (2002) *Looking for information: a survey of research on information seeking, needs and behaviour*, Academic Press.
- Casey, A. (2005) 'Enhancing individual and organisational learning: a sociological model', *Management Learning*, 36 (2), pp. 131 – 147.

Chambers Concise Dictionary (1991) Chambers.

Charmaz, K. (2006) *Constructing grounded theory: a practical guide through qualitative analysis*. Sage Publications.

Cheuk, B. W. (1998) 'Modelling the information seeking and use process in the workplace', *Information Research*, 4 (2), [Available at: <http://InformationR.net/ir/4-2/isic/cheuk.html>] (Accessed: 15th August 2001).

Chourides, P. Longbottom, D. and Murphy, W. (2003) 'Excellence in knowledge management: an empirical study to identify critical factors and performance measures', *Measuring Business Excellence*, 7 (2), pp. 29-45.

Constructivist Learning Theory, (2004) [Available at: <http://www.artsined.com/teachingarts/Pedag/Dewey.html>] (Accessed: 26th April 2004).

Darroch, J. (2003) 'Developing a measure of knowledge management behaviours and practices', *Journal of Knowledge Management*, 7 (5), pp. 41-54.

Denscombe, M. (2003) *The good research guide for small scale social research projects*. 2nd ed. Open University Press.

Denzin, N. K. and Lincoln, Y. S. (eds) (1998) *The landscape of qualitative research: theories and issues*. Sage Publications.

Denzin, N. K. & Lincoln, Y. S. (eds) (1998) *Strategies of qualitative inquiry*. Sage Publications.

Dey, I. (1993) *Qualitative data analysis: a user friendly guide for social scientists*. Routledge.

Doolittle, P. E. (1999) 'Integrating constructivism & cognitivism', [Available at: <http://edpsychserver.ed.vt.edu/research/icc.html>] (Accessed 17th March 2007).

du Troit, A. (2003) 'Knowledge: a sense making process shared through narrative', *Journal of Knowledge Management*, 7 (3) pp. 27-37.

Eager, C. and Oppenheim, C. (1996) 'An observational method for undertaking user need studies', *Journal of Librarianship and Information Science*, 28 (1), pp.15-23.

Eisenhardt, K. M. (1989) 'Building theories from case study research', *Academy of Management Review*, 14 (4), pp. 532-550.

Elkjaer, B. (2001) 'The learning organisation: an undelivered promise', *Management Learning*, 32 (4), pp. 437 – 452.

Ellis, D. (1993) 'Modeling the information-seeking patterns of academic researchers: a grounded theory approach', *Library Quarterly*, 63 (4), pp. 469-486.

Ellis, D., Cox, D and Hall, K. (1993) 'A comparison of the information seeking patterns of researchers in the physical and social sciences', *Journal of Documentation*, 49 (4), pp. 356-369.

Ellis, D. and Haugan, M. (1997) 'Modelling the information seeking patterns of engineers and research scientists in an industrial environment', *Journal of Documentation*, 53 (4), pp. 384-403.

Entwistle, N. (1981) *Styles of learning and teaching: an integrated outline of Educational Psychology for students, teachers and lecturers*. John Wiley and Sons.

Erlandson, D. A., Harris, E. L., Skipper, B.L. and Allen, S. D. (1993) *Doing naturalistic inquiry: a guide to methods*. Sage Publications.

Fenwick, T. (2006) 'Tidying the territory: questioning terms and purposes in work-learning research', *Journal of Workplace Learning*, 18, (5) pp. 265 – 278.

Ford, N. (2004) 'Modeling cognitive processes in information seeking: from Popper to Pask', *Journal of the American Society for Information Science and Technology*, 55 (9), pp. 769-782.

Ford, N. (2004) 'Towards a model of learning for educational informatics', *Journal of Documentation*, 60 (2), pp. 183-225.

Froggatt, K. A. (2001) 'The analysis of qualitative data: processes and pitfalls', *Palliative Medicine*, 15, pp. 433-438.

Gerber, R. (1998) 'How do workers learn in their work?', *The Learning Organisation*, 5 (4) pp. 168-175.

Gergen, K. (2004) *Constructivist epistemology*, [Available at: <http://www.stemnet.nf.ca/~elmurphy/emurphy/cl2.html>] (Accessed 26th April 2004).

Godbold, N. (2006) 'Beyond information seeking: towards a general model of information behaviour', *Information Research*, 11 (4) paper 269 [Available at: <http://InformationR.net/ir/11-4/paper269.html>] (Accessed 24th March 2007).

Goriely, T. and Williams, T. (1996) *The impact of the new training scheme*. TPR (Social and Legal Research, Research study no.22). Law Society.

Gorman, G.E. & Clayton, P. (2005) *Qualitative research for the information professional: a practical handbook*. 2nd ed. Facet Publishing.

Gottschalk, P. (2000) 'Use of IT for knowledge management in law firms', *The Journal of Information, Law and Technology*, [Available at:

<http://www.law.warwick.ac.uk/jilt/99-3/gottschalk.html>] (Accessed: 19th June 2001).

Gottschalk, P. (1999) 'Knowledge management in the professions: lessons learned from Norwegian Law firms', *Journal of Knowledge Management*, 3 (3), pp. 203-211.

Goulding, C. (2005) 'Grounded theory, ethnography and phenomenology: a comparative analysis of three qualitative strategies for marketing research', *European Journal of Marketing*, 39 (3/4), pp. 294-308.

Guba, E. G. and Lincoln, Y. S. (1998) 'Competing paradigms in qualitative research', in Denzin, N. K. and Lincoln, Y. S. *The landscape of qualitative research: theories and issues*. Sage Publications, pp. 195- 220.

Harvard Business Review on Organisational Learning (2001) Harvard Business School Publishing Corporation.

Heath, H. and Cowley, S. (2004) 'Developing a grounded theory approach: a comparison of Glaser and Strauss', *International Journal of Nursing Studies*, 41 pp. 141-150.

Hildreth, P.J. and Kimble, C. (2002) 'The duality of knowledge', *Information Research*, 8 (1), paper 142. [Available at <http://InformationR.net/ir/8-1/paper142.html>] (Accessed 8th August 2005).

Holloway, W. and Jefferson, T. (2000) *Doing qualitative research differently: free association, narrative and the interview method*. Sage Publications.

Honey, P. and Mumford, A. (1992) *The manual of learning styles*, Peter Honey.

Hutchinson, S. (2006) 'Learning by doing', *New Law Journal*, 1751, 2006. [Available at: www.lexisnexis.com] (Accessed 17th March 2007).

Jarvelin, K. and Ingwersen, P. (2004) 'Information seeking research needs extension towards tasks and technology', *Information Research*, 10 (1) paper 212 [Available at: <http://InformationR.net/ir/10-1/paper212.html>] (Accessed 15th March 2007).

Jarvelin, K. and Wilson, T.D. (2003) 'On conceptual models for information seeking and retrieval research', *Information Research*, 9 (1), paper 163. [Available at <http://InformationR.net/ir/9-1/paper163.html>] (Accessed: 8th August 2005).

Jashapara, A. (2005) 'The emerging discourse of knowledge management: a new dawn for information science research', *Journal of Information Science*, 31 (2), pp. 136-148.

Jasimmuddin, S. M., Klein, J. H. and Connell, C. (2005) 'The paradox of using tacit and explicit knowledge; strategies to face dilemmas', *Management Decision*, 43 (1), 102-112.

Jordan, A. T. 'Critical incident story creation and culture formation in a self-directed work team', *Journal of Organisational Change Management*, 9 (5), pp. 27-35.

Josselson, R. & Lieblich, A. (eds) (1999) *Making meaning of narratives*. (The narrative study of lives Vol. 6). Sage Publications.

Kakabadse, N. K., Kakabadse, K. and Kouzmin, A. (2003) 'Reviewing the knowledge management literature: towards a taxonomy', *Journal of Knowledge Management*, 7 (4), pp. 75-91.

Kari, J. (2007) 'Conceptualising the personal outcomes of information', *Information Research* 12 (2) paper 292 [Available at: <http://InformationR.net/ir/12-2/paper292.html>] (Accessed 17th March 2007).

Kerins, G., Madden, R., and Fulton, C. (2004) 'Information seeking and students studying for professional careers: the cases of engineering and law students in Ireland', *Information Research*, 10 (1), paper 208. [Available at <http://InformationR.net/ir/10-1/paper208.html>] (Accessed: 8th August 2005).

Kerka, S. (1998) 'New perspectives on mentoring', *ERIC Digest* [Available at: <http://www.ericdigests.org/1998-3/mentoring.html>] (Accessed 17th March 2007).

Kerka, S. (1997) 'Constructivism, workplace learning and vocational education', *ERIC Digest* [Available at: www.ericdigests.org/1998-1/learning.htm] (Accessed 17th March 2007).

Kirk, J. (1997) 'Manager's use of information: a grounded theory approach', in: Vakkari, P., Savolainen, R. and Dervin, B. (eds) *Information seeking in context. Proceedings of an International Conference on Research in Information Needs, Seeking, and Use in Different Contexts* 14th-16th August, 1996, Tampere, Finland, pp. 257-266.

Kogut B. and Zander, U. (1997) 'Knowledge of the firm. Combinative capabilities, and the replication of technology', in: Prusak, L. *Knowledge in organisations*. Butterworth-Heinemann.

Kolb, D. A. (1984) *Experiential Learning*, Prentice Hall.

Koskinen, K. U. 'Evaluation of tacit knowledge utilisation in work units', *Journal of Knowledge Management*, 7 (5), pp. 67-81.

Kuhlthau, C. C. (2004) *Seeking meaning: a process approach to library and information services*. 2nd ed. Libraries Unlimited.

Kuhlthau, C. C. (1993) *Seeking meaning: a process approach to library and information services*. Ablex Publishing Corporation.

Kuhlthau, C. C. (1991) 'Inside the search process: information seeking from the user's perspective', *Journal of the American Society for Information Science*, 42 (5), pp. 361-371.

Kuhlthau, C. C. and Tama, S. L. (2001) Information search process of lawyers: a call for 'just for me' information services. *Journal of Documentation* vol. 57 (1) pp.25-43.

Kuhlthau, C. C. and Vakkari, P. (1999) 'Information seeking in context (editorial)', *Information Processing and Management*, 35, pp. 723-725.

Lave, J. and Wenger, E. (1991) *Situated learning: legitimate peripheral participation*, Cambridge university Press.

Law Society (2005) *Training trainee solicitors: The Law Society requirements*. The Law Society.

'Learning to forget and forgetting to learn', (2004) *Development and Learning in Organisations*, 18 (6) pp.26-29.

Leckie, G. J., Pettigrew, K. E. and Sylvain, C. (1996) 'Modelling the information seeking of professionals: a general model derived from research on engineers, health care professionals and lawyers', *Library Quarterly*, 66 (2), pp.161-193.

Lewis, D. (2002) 'Five years on – the organisational culture saga revisited', *Leadership and Organisation Development Journal*, 23 (5), pp. 280-287.

Lieblich, A, Tuval-Mashiach, R. & Zilber, T. (1998) *Narrative research: reading, analysis, and interpretation*. Sage Publications.

Liebowitz, J. (ed.) (1999) *Knowledge management handbook*. CRC Press

Lietz, C. A., Langer, C. L. and Furman, R. (2006) 'Establishing trustworthiness in qualitative research in social work', *Qualitative Social Work*, 5 (4), pp. 441-458.

Limberg, L. (1999) 'Experiencing information seeking and learning: a study of the interaction between two phenomena', *Information Research*, 5 (1), paper 68, [Available at: <http://InformationR.net/ir/5-1/paper68.html>] (Accessed: 15th August 2001).

Lincoln, Y. S. and Guba, E. G. (1985) *Naturalistic inquiry*. Sage Publications.

Linde, C. (2001) 'Narrative and social knowledge', *Journal of Knowledge Management*, 5 (2), pp. 2-14.

Lindsay, P. H. and Norman, D. A. (1975) Human information processing. In: Entwistle, N. and Hounsell, D. (eds) *How students learn*, University of Lancaster pp. 67 - 81.

Lloyd, A. and Somerville, M. (2006) 'Working information', *Journal of Workplace Learning*, 18 (3), pp. 186 – 198.

McDermott, R. and O'Dell, C. (2001) 'Overcoming cultural barriers to sharing knowledge', *Journal of Knowledge Management*, 5 (1), pp. 76-85.

McGregor, J. H. and Williamson, K. (2005) 'Appropriate use of information at the secondary school level: understanding and avoiding plagiarism', *Library and Information Science Research*, 27 (4), pp. 496-512.

Mainemelis, C., Boyatzis, E. and Kolb, D. A. (2002) 'Learning styles and adaptive flexibility: testing Experiential Learning Theory', *Management Learning*, 33 (1), pp. 5 – 33.

Marchand, D. A. (1998) 'Competing with intellectual capital', in: von Krogh, G, Roos, J and Kleine, D (eds) *Knowing in firms: understanding, managing and measuring knowledge*. Sage Publications, pp. 253 – 268.

Markless, S. 'Teaching your users: what you really need to know', *Legal Information Management* 4 (4), p. 221.

Mellon, C. A. (1990) *Naturalistic inquiry for library science: methods and applications for research, evaluation and teaching*. Greenwood Press.

Merriam, S. B. and Caffarella, R. S. (1999) *Learning in adulthood: a comprehensive guide*. 2nd ed. Josey-Bass.

Mishler, E. G. (1986) *Research interviewing: context and narrative*. Harvard Univ. Press.

Murray, P. and Donegan, K. (2003) 'Empirical linkages between firm competencies and organisational learning', *The Learning Organisation*, 10 (1), pp. 51-62.

Niedzwiedzka, B. (2003) 'A proposed general model of information behaviour', *Information Research*, 9 (1), paper 164, [Available at: <http://InformationR.net/ir/9-1/paper164.html>] (Accessed: 8th May 2006).

Nonaka, I. (1991) 'The knowledge creating company', *Harvard Business Review*, 71 (6), pp. 96-104.

Nonaka, I. and Takeuchi, H. (1995) *The knowledge creating company: how Japanese companies create the dynamics of innovation*. Oxford University Press.

O'Donoghue, J. and Maguire, T. (2005) 'The individual learner, employability and the workplace', *Journal of European industrial Training*, 29 (6), pp. 436 – 446.

- Oliver, R. and Oliver, H. (1997) 'Using context to promote learning from information-seeking tasks', *Journal of the American Society for Information Science*, 48 (6), pp. 519 – 526.
- Oma, E. (1999). *Practical information policies*. 2nd ed. Gower.
- Otike, J. (1999) 'The information needs and seeking habits of lawyers in England: a pilot study', *International Information and Librarianship Review*, 31, 19-39.
- Pace, S. (2004) 'A grounded theory of the flow experiences of Web users', *International Journal of Human-Computer Studies*, 60, pp. 327-363.
- Pandit, N. R. (1996) 'The creation of theory: a recent application of the grounded theory method', *The Qualitative Report*, 2 (4), [Available at: <http://www.nova.edu/ssw/QR/QR2-4/pandit.html>] (Accessed: 21st December 2005).
- Parker, N. (2001) 'Student learning as information behaviour: exploring Assessment Task Processes', *Information Research*, 6 (2) [Available at: <http://InformationR.net/ir/6-2/ws5.html>] (Accessed 15th March 2007).
- Parsons, M. (2004) *Effective knowledge management for law firms*. Oxford University Press.
- Pharo, N. (2004) 'A new model of information behaviour based on the search situation transition schema', *Information Research*, 10 (1), paper 203, [Available at: <http://InformationR.net/ir/10-1/paper203.html>] (Accessed: 8th August 2005).
- Pickard, A.J. (2002) *Access to electronic information resources: their role in the provision of learning opportunities for young people. A constructivist enquiry*. PhD University of Northumbria at Newcastle.

Pickard, A. & Dixon, P. (2004) 'The applicability of constructivist user studies: How can constructivist inquiry inform service providers and systems designers?' *Information Research*, 9 (3) paper 175, [Available at: <http://InformationR.net/ir/9-3/paper175.html/>] (Accessed: 8th August 2005).

Poell, R. F. and van der Krogt, F. J. (1997) 'Organising work-related learning projects', *International Journal of Training and Development*, 1:3, pp. 181 – 190.

Politis, J.D. (2003) 'The connection between trust and knowledge management: what are its implications for team performance', *Journal of Knowledge Management*, 7 (5), pp. 55-66.

Polkingthorne, D. E. (1988) *Narrative knowing and human sciences*. SUNY Press.

Probst, G., Buchel, B. and Raub, S. (1998) 'Knowledge as a strategic resource', in: von Krogh, G, Roos, J and Kleine, D (eds) *Knowing in firms: understanding, managing and measuring knowledge*. Sage Publications, pp. 240 – 252.

Prusak, L. (ed) (1997) *Knowledge in organisations*, Butterworth-Heinemann.

Raelin, J. A. (1998) 'Work-based learning in practice', *Journal of Workplace Learning*, 10 number 67, pp. 280-283.

Reio, T. G. and Wiswell, A. (2000) 'Field investigation of the relationship among adult curiosity, workplace learning, and job performance', *Human Resource Development Quarterly*, 11 (1), pp. 5 – 30.

Rollinson, D. (2005) *Organisational behaviour and analysis: an integrated approach*. 3rd ed. Financial Times/Prentice Hall.

Rowbotham, D. (2004) 'Developing competent learners: fine tuning the pursuit of effective learning', *Development and Learning in Organisations*, 18 (4), pp. 25-27.

Rumizen, M. C. (2002) *The complete idiot's guide to knowledge management*. John A. Woods, CWL Publishing Enterprises.

Rusanow, G. (2003) *Knowledge Management and the smarter lawyer*. ALM Publishing.

Selden, L. (2005) 'On grounded theory – with some malice', *Journal of Documentation*, 61 (1), pp. 114-129.

Senge, P. (1990) *The fifth discipline: the art and practice of the learning organisation*. Currency.

Schwandt, T. A. (1998) 'Constructivist, interpretivist approaches to human inquiry', in Denzin, N. K. and Lincoln, Y. S. *The landscape of qualitative research: theories and issues*. Sage Publications, pp. 221-259.

Sparrow, J. (1998) *Knowledge in organisations: access to thinking at work*. Sage Publications.

Stake, R. E. (1995) *The art of case study research*. Sage Publications.

Stein, D. (1998) 'Situated learning', *ERIC Digest*, 3 [Available at: <http://www.ericdigests.org/1998-3/adult-education.html>] (Accessed 14th March 2007).

Strauss, A. and Corbin, J. (1998) *Basics of qualitative research: techniques and procedures for developing grounded theory*. 2nd ed. Sage Publications.

Sun, P.Y.T and Scott, J. L. (2005) 'An investigation of barriers to knowledge transfer', *Journal of Knowledge Management*, 9 (2), pp. 75-90.

Sun, P. Y. T. and Scott, J. L. (2003) 'Exploring the divide: organisational learning and learning organisation', *The Learning Organisation* 10 (4), pp. 202-215.

Talja, S., Keso, H. & Pietilainen, T. (1999) 'The production of 'context' in information seeking research: a metatheoretical view', *Information Processing and Management*, 35, pp. 751-763.

Tierney, W. G. (1988) 'Much ado about something: naturalistic inquiry and the paradigm', *The Journal of Higher Education*, 59 (2), pp. 225-230.

Vakkari, P. (2003) 'Task-based information searching', *Annual Review of Information science and Technology*, 37, pp. 413-464.

Vakkari, P. (2001) 'A theory of the task-based information retrieval process: a summary and generalisation of a longitudinal study', *Journal of Documentation*, 57 (1), pp. 44-60.

Vakkari, P. (1999) 'Task complexity, problem structure and information actions. Integrating studies on information seeking and retrieval', *Information Processing and Management*, 35, pp. 819-837.

Vakkari, P., Savolainen, R. and Dervin, B. (1997) *Information seeking in context. Proceedings of an International Conference on Research in Information Needs, Seeking, and Use in Different Contexts*, 14-16th August 1996, Tampere, Finland.

Von Krogh, G., Roos, J. and Kleine, D. eds (1998) *Knowing in firms: understanding, managing and measuring knowledge*. Sage Publications.

Wagner, B. A. (2003) 'Learning and knowledge transfer in partnering: an empirical case study', *Journal of Knowledge Management*, 7 (2), pp. 97-113.

- Wang, C. L. and Ahmed, P. K. (2003) 'Organisational learning: a critical review', *The Learning Organisation*, 10 (1), pp. 8-17.
- Whittemore, R., Chase, S. K. and Mandle, C. L. (2001) 'Validity in qualitative research', *Qualitative Health Research*, 11 (4), pp. 522-537.
- Wilkinson, M. A. (2001) 'Information sources used by lawyers in problem solving: an empirical exploration', *Library and Information Science Research*, 23, pp. 257-276.
- Wilson, A. M. (2001) 'Understanding organisational culture and the implications for corporate marketing', *European Journal of Marketing*, 35 (3/4), pp. 353-367.
- Wilson, T. D. (2002) 'The nonsense of 'knowledge management'', *Information Research*, 8 (1), paper no. 144, [Available at <http://InformationR.net/ir/8-1/paper144.html>] (Accessed: 8th August 2005).
- Wilson, T. D. (2000) 'Recent trends in user studies: action research and qualitative methods', *Information Research* 5 (3), paper 76, [Available at: <http://InformationR.net/ir/5-3/paper76.html>] (Accessed: 14th August 2001).
- Wilson, T. D. (1999) 'Models in information behaviour research', *Journal of Documentation*, 55 (3), pp. 249-270.
- Wilson, T. D. (1999) 'Exploring models of information behaviour: the 'uncertainty' project', *Information Processing and Management*, 35, pp. 839-849.
- Wilson, T. D. (1999) 'Models in information behaviour research', *Journal of Documentation*, 55 (3), pp. 249-270.
- Wilson, T. D. (1981) 'On user studies and information needs', *Journal of Documentation*, 37 (1), pp. 3-15.

Wilson, T. D. and Walsh, C. (1996) *Information behaviour: an interdisciplinary perspective. A review of the literature*. British Library Research and Innovation Centre. (British Library Research and Innovation Report no. 10).

Yeo, R. (2002) 'Learning within organisations: linking the theoretical and empirical perspectives', *Journal of Workplace Learning*, 14 (3), pp.109-122.

Yoon, K. (1998) 'The use of certainty and role of topic and comment in interpersonal information seeking interaction', *Information Research*, 4 (2), [Available at: <http://InformationR.net/ir/4-2/isic/yoan.html>] (Accessed: 15th August 2001).

Yoon, K. & Nilan, M. S. (1999) 'Toward a reconceptualization of information seeking research: focus on exchange of meaning', *Information Processing and Management*, 35, pp. 871-890.

Appendix 1

Member Check from Trainees

Due to a need for anonymity the two member check emails received have been saved as word files and amended accordingly. The original emails are with the evidence box.

Abbreviated messages are given below

Trainee Response

Hi Shona

Sorry for the delay in coming back to you. I did have a look through your analysis on the previous draft and did not see anything that I disagreed with.

I'm afraid as it is that time of year, I have been really busy while a lot of my colleagues have been on holiday. I am also on holiday for 2 weeks starting on the 5 June. Unfortunately, I do not think I will get a chance to consider another draft.

I hope this isn't too much of a problem.

Kind regards

Trainee Response

Dear Shona,

I have looked through the analysis and intended to get back to you before now. I'm sorry about that. I am happy with your interpretations and have no amendments to make.

Thanks

AND, I response to my thanks;

Thank you and Good Luck with it all.

It was actually quite interesting reading! I'm now supervising a trainee and I think being reminded of what I thought about trainee life has helped.

Best wishes

Appendix 2

Member check – Legal Expert

From: Philip Roberts
Sent: 27 November 2006 08:41
To: Shona Metavish
Subject: PhD chapter 4
Dear Shona

Thank you for sending me a copy of Chapter 4 of your thesis.

While I am not conversant with some of the more technical points that you make, I can say that I found the empirical evidence that you present and your interpretation of it both recognisable and interesting. Although I have no knowledge of the firm or firms that you base your research on, the themes that are disclosed and discussed are familiar to me, having worked both as a property fee earner and a training manager in commercial firms. The topic you have chosen is very relevant in the light of the continuing discussion within the profession about the future of solicitors' education and training.

I look forward to reading the completed work.

Kind regards

Philip

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Fax: 0191 227 4557
e-mail: philip.roberts@unn.ac.uk

Appendix 3

Open Coding

1. Communication
2. Accommodation /situation of trainee
3. Interpretation and understanding of task
4. Recognition of a need to know more
5. Perception of task (difficulty, urgency)
6. Depth of information provided
7. Guidance (as to resources, how to approach the task)
8. Trainee's approach to task (information behaviour?)
9. Failure
10. Trainee's perception of supervisor's/partner's approach (and of supervisor – personality?)
11. Partner approach (+ personality? + feedback)
12. Trainee's preference – meeting trainee's needs
13. Level of involvement
14. Trainees' perception of partner's/supervisor's needs
15. Trainees' previous experience
16. Trainee's knowledge of resources (familiarity of resources (including people))
17. Trainee's perception of acceptable behaviour or procedures
18. Partner's/supervisor's perception of acceptable behaviour
19. Partner's/supervisor's perception of trainee's knowledge
20. Partner/supervisor's influence on trainee behaviour
21. Trainee's knowledge of how solicitors work
22. Trainee's knowledge of the organisation
23. Knowledge sharing
24. Reflection on work, on knowledge
25. Access to resources
26. Learning
27. Training
28. Perception of what other people know
29. Memory
30. Confidence
31. Time served

Appendix 4

Axial Coding

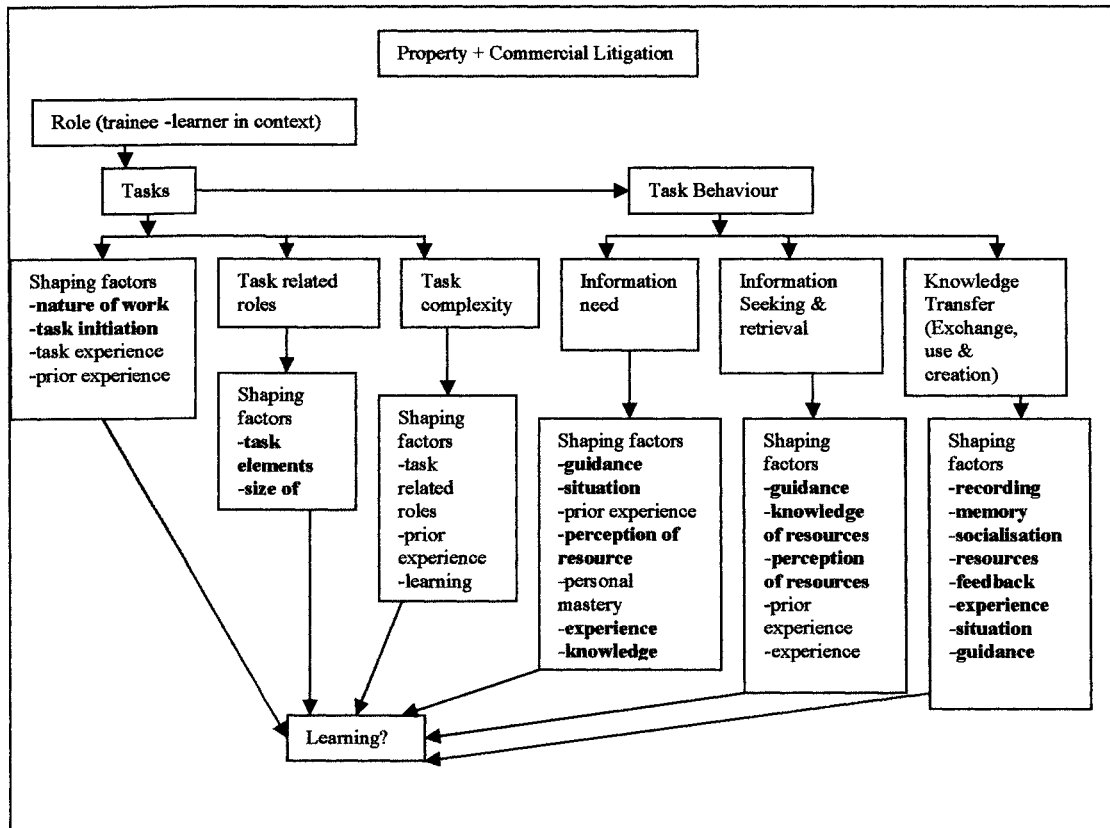
Axial or Classification coding

1. Task (31)
 - a. Time (31)
 - b. Trainee's knowledge of how solicitor's work (21)
 - c. Trainee's knowledge of the organisation (22)
 - d. Interpretation and understanding of task (3)
 - e. Perception of task (difficulty, urgency) (5)
 - f. Depth of information provided (6)
 - g. Guidance (as to resources, how to approach the task) (7)
 - h. Trainee's perception of supervisor's/partner's approach (and of supervisor – personality?) (10)
2. Information need (8)
 - a. Recognition of a need to know more (4)
 - b. Interpretation and understanding of task (3)
 - c. Guidance (as to resources, how to approach the task) (7)
 - d. Failure (9)
 - e. Communication (1)
3. Information seeking (8)
 - a. Interpretation and understanding of task (3)
 - b. Perception of task (difficulty, urgency) (5)
 - c. Depth of information provided (6)
 - d. Guidance (as to resources, how to approach the task) (7)
 - e. Failure (9)
 - f. Trainee's perception of supervisor's/partner's approach (and of supervisor – personality?) (10)
 - g. Trainee's knowledge of how solicitor's work (21)
 - h. Trainee's knowledge of the organisation (22)
 - i. Access to resources (25)
4. Information processing (8)
 - a. Depth of information provided (6)
 - b. Failure (9)
5. Information use (8)
 - a. Perception of what other people know (28)
 - b. Knowledge sharing (23)
 - c. Trainee's knowledge of how solicitor's work (21)
 - d. Trainee's knowledge of the organisation (22)
 - e. Recognition of a need to know more (4)
 - f. Memory (29)
 - g. Interpretation and understanding of task (3)
 - h. Perception of task (difficulty, urgency) (5)
 - i. Depth of information provided (6)
 - j. Guidance (as to resources, how to approach the task) (7)
 - k. Trainee's perception of supervisor's/partner's approach (and of supervisor – personality?) (10)
6. Learning (26)
 - a. Training (27)
 - b. Reflection on knowledge, work (24)
 - c. Recognition of a need to know more (4)
 - d. Interpretation and understanding of task (3)
 - e. Perception of task (difficulty, urgency) (5)
 - f. Depth of information provided (6)
 - g. Guidance (as to resources, how to approach the task) (7)
 - h. Trainee's approach to task (information behaviour) (8)
 - i. Failure (9)

- j. Trainee's perception of supervisor's/partner's approach (and of supervisor – personality?) (10)
 - k. Situation (2)
- 7. Feelings
 - a. Confidence (30)
 - b. Perception of task (difficulty, urgency) (5)
- 8. Cross theme factors
 - a. Situation (2)
 - b. Trainee's knowledge of the organisation (22)
 - c. Trainee's knowledge of how solicitor's work (21)
 - d. Recognition of a need to know more (4)
 - e. Memory (29)
 - f. Interpretation and understanding of task (3)
 - g. Perception of task (difficulty, urgency) (5)
 - h. Depth of information provided (6)
 - i. Guidance (as to resources, how to approach the task) (7)
 - j. Trainee's perception of supervisor's/partner's approach (and of supervisor – personality?) (10)

Appendix 5

Example of initial mapped diagram



Appendix 6

Penultimate analysis

The day-to-day life of the trainees can be characterised through an exploration of the tasks that they are given to undertake.

1. Mastering Tasks (The trainees learn through the tasks that they undertake)

1.1 What types of tasks are the trainees given to work on?

Through an exploration of the types of tasks the trainees are given to do, a feeling for the context of their working environment is captured, and an indication of their potential information and knowledge needs, begins to emerge.

The types of tasks undertaken were found to be determined by the nature of the work carried out and as such were influenced by the context of the training, that is, the seat of law in which the trainees sit.

Within the Commercial Litigation seat, where, as highlighted by Trainee 1, *a lot of the litigation cases go on for longer than the six months* (CLP3), tasks were initially expressed as being ‘small’, ‘little things’ involving, for example, drafting, legal research, speaking to clients and correspondence. (CLP2)

Trainee 1 – ‘Quite a few (tasks) [and] It’s various little things, because that is how litigation works.’

Trainee 4 – ‘more general, small research things’

Trainee 3 – ‘I’m supposed to be working for [named solicitor] but I only do a bit for her and I do bits for everyone else as well’

Trainee 2 – ‘I primarily do little tasks on other people’s files’
(CLP1)

As the trainees are undertaking small tasks on a larger file matter and as these matters often last longer than the seat of training, then this would suggest that it can be difficult for the trainees to come to know and understand the full history behind a case due to their level of involvement. Trainee 2 reflects on two occasions in Commercial Litigation where not knowing the case was perceived as affecting her learning or ability to carry out the task. The first was as a part of a team where, due to the nature of the file matter, she was given photocopying to do;

Trainee 2 – ‘I didn’t feel I learned much cause I wasn’t really involved in the details of the case’
(HM1)

The second was in relation to the disclosure of documents, described as a ‘common task’ (CLP11), for trainees to be given,

Trainee 2 – ‘but it’s actually quite difficult to do unless you know the file’ (CLP11)

As the trainees progressed through the seat, ‘timing’, ‘time served’, and the ‘approach of the supervisor’, were identified as leading to an increased involvement in tasks and therefore the potential for increased learning;

Trainee 1 – ‘I was quite lucky because quite a few new cases came through the door that were small enough for me to handle, so I got control of those cases, obviously with supervision’

Trainee 4 – ‘Then as the seat has gone on I would get more involved with specific files and cases – and I would do research work on them and I would do other work like drafting, letters, etc’

Trainee 2 – ‘he [supervisor] has got me quite involved in lots of files whereby correspondence will go in and go out and possibly and he will be monitoring what goes on in the files but I get to do quite a lot of it. Any big documents he lets me have a stab at it and he’ll amend as necessary’
(CLP4)

Linked to the reasons suggested above as leading to an increased involvement in tasks is situation. Trainee 1, Trainee 4 and Trainee 2 are sitting with their supervisor and all indicate a more in-depth involvement in tasks as they progress through the seat. Trainee 3 however, does not sit with her supervisor which might explain why she does not indicate any in-depth involvement in files.

Trainee 3 – 'I'm still physically in the employment department – and I'm not actually working in anyone's team in litigation I just work for a lot of people, cause normally you are assigned to a bit of a team you know' (CLP5)

In contrast, the tasks discussed within the Property seat were perceived as being 'big' or 'major', for example;

Trainee 6 – 'one of the major things that I have been involved in is ehm a potential compulsory purchase order of some land' (P1)

Trainee 5 – 'The most recent thing which was the biggest thing that I have done was probably the sale of a property' (P3)

Furthermore, Trainee 1 highlights having her own clients;

Trainee 1 – 'but now I'm dealing with my own clients and a lot of residential sales and purchases' (P6)

In the interview situation it is possible that the trainees will have opted to discuss the 'bigger' tasks as these might stand out more in their minds because of their size and potentially be seen by them to be of more interest to themselves and to the interviewer. However, the tasks, a 'sale of a property' and the 'compulsory order of some land', do suggest themselves as being complete tasks and larger than, for example, drafting or correspondence and as such indicate the potential for learning about a matter more holistically. Further evidence of this is offered by Trainee 2, where the buying and selling of property is suggested as being a routine feature of work within the Property department, one that is often given over to trainees as a method of learning:

Trainee 2 – 'when I first started they train you up on ... they give you the residential stuff just to get started and find your way round and get used to handling transactions on your own. Slowly I have been given more commercial style leases and transactions like that to do with ... licences to assign where we act for the landlord and he leases out one of his properties, maybe a shop or something, and the tenant wants to assign it to somebody else then you have to get the landlord's approval to do so' (P9)

Increased involvement in tasks within Property is suggested more by the nature of the task rather than involvement within a task. Trainee 2 suggests that as she gains more experience as she progresses through the seat, she is given different, and what potentially appear to be, more complex tasks to undertake.

1.1.1 Supervision

Trainee 1 and Trainee 2 note that their work within Commercial Litigation is supervised or monitored. This need for supervision is a further indicator of the nature of the work in Commercial Litigation and as Trainee 2's reflection suggests, there is a need to ensure and confirm accuracy in litigation work;

Trainee 2 – 'I can appreciate why in litigation you have to keep things much more monitored because one wrong word in a letter will really affect things but in property it is not quite as ... not cut-through but there is less emphasis put on that side of things.' (CLP29)

This suggested 'less emphasis' does not necessarily mean that Property is less rigorous in their work but that the nature of the working of the legal areas is different.

The trainees were also supervised within Property but in contrast to Commercial Litigation, they do not appear to be as closely supervised, with supervision appearing to be linked more to the seeking of guidance and help. For example, both Trainee 5 and Trainee 6 were working under supervision, Trainee 6 under a team of solicitors and Trainee 5 under a single supervisor. Trainee 5 sought help as required;

Trainee 5 - 'So I would say that I would check things with my supervisor and get back to you. He [supervisor] would tell me what to do and I would get back to the client'. (P2)

Trainee 6 works as part of a team and as such does not indicate approaching her supervisor directly, but this would not necessarily be required as the team would meet regularly;

Trainee 6 - 'but like we had quite regular meetings to discuss how things were going and who was doing what.' [and] 'I know everything that is going on and I'm involved in the department but basically, it's, they run down the list of what work you have got on and might discuss it a bit'(P4)

In contrast, Trainee 1 does not indicate working under a supervisor but nevertheless does suggest approaching, when uncertain, those responsible for giving her the work;

Trainee 1 - 'I've been given leases that have been very, very complicated and I've gone through it and again done my best and said I don't like this and I don't like that, this is why and have gone through it with the person who has given it to me' (P8)

1.1.2 In Summary

From the above analysis of the key theme 'tasks' emerging shaping themes identified are 'nature of work', 'situation' and 'level of involvement'.

Evidence suggests that context, in the form of the nature of the work within the seat, potentially shapes the experiences of the trainees. Depending on what seat a trainee is in, their situation within that seat and the tasks they are given to do within that seat, their level of involvement in matters can be considered 'partial' or 'complete' and subsequently their learning as the result of the allotted tasks can be suggested as being 'partial' or 'complete'. However, the trainees will not be involved in only one task during their period in each seat and as such are likely to build up their experiences and their learning as they progress through the seat. For example, within Commercial Litigation where initially tasks were identified as 'small', and therefore suggesting partial learning, 'timing', 'time served', and the 'approach of the supervisor', were identified as leading to an increased involvement in tasks, furthering the trainees' potential for acquiring a more complete learning experience. Within the Property seat, time served is further suggested but in relation to the different types of tasks allocated to the trainee as a result of their acquired experience. These tasks although not specifically referred to as being more difficult in nature, are suggested as such by the trainee's narration '*slowly I have been given more commercial style leases*' indicating that perhaps commercial work is perceived as more challenging than residential work.

The apparent 'very close' supervision of work within Commercial Litigation would appear to be indicative of the nature of the work within that seat and as such is likely to influence how the trainees perform their tasks and how they go about identifying and meeting their information needs.

What the trainees' actual information needs are, are difficult to concisely identify, as at this point there is only an awareness of the types of tasks they have been given to undertake, but these tasks are at least indicative of their initial need, for example, the need to have the information to be able to draft leases, to proceed with sales, to satisfy the research request and so forth. What is beginning to emerge, however, is that the tasks might require more than information to meet the needs of the trainees in satisfying the tasks but knowledge; the know-how to perform the tasks.

By considering the role of the trainee in undertaking tasks in more depth, this suggested mutual need for information and know-how can be explored further.

1.2 What is the role of the Trainee in undertaking these tasks?

The role of the trainees is of learner, as students of law. This role in itself suggests a need for information and knowledge in order to learn. In their role as learners, they are likely to be given tasks felt appropriate for a trainee to undertake, for example, the drafting of documents (Goriely & Williams, 1996). In undertaking this task, the trainees will need to seek information about the drafting of the document but in addition they will also need to learn how to draft the document, to understand the task of drafting documents and as such indicates a need for both information and knowledge. The tasks

undertaken by the trainees, however, not only indicate an information and knowledge need but often result in the trainees playing differing roles in working towards the completion of tasks. These roles, where they result in further activities, suggest a further need for information and knowledge in order to meet the needs of these activities.

Within Commercial Litigation, despite the tasks being small the trainees were found to undertake a range of roles when carrying out these tasks. The tasks the trainees were involved in included:

Trainee 1 – client contact, drafting, timetables, hearings,

Trainee 2 – correspondence, drafting, speaking to the clients, speaking to the barristers, procedural aspects

Trainee 3 – procedural aspects, legal research, brief to Council, instruct agents, interview witnesses, take witness statements, file things at court, faxes, letters, telephone calls

Trainee 4 – research basic points

In considering the tasks the trainees were allocated, a number of roles can be identified, for example, Trainee 1 was given the task of drafting documents and as such her role became that of drafter. Trainee 4 was given the task to research into some basic points of law and as such takes on the role of researcher. Trainee 3 was given the task of briefing council and as such took on the role of advisor and Trainee 2 was given the task of speaking to clients and, depending on the context, will have taken on any one of a number of roles; researcher, informer and, or, advisor.

As the trainees within Commercial Litigation were allocated tasks that formed part of a larger file matter then it can be suggested that, at least at the beginning of their seat, the task tended to result in the undertaking of a single additional role, to that of learner, to satisfy the task given. In contrast, the trainees, whilst in Property, were found to undertake a number of roles stemming from a single task.

For example, one of Trainee 5's more recent tasks and what she perceived to be one of the 'biggest things', within this seat was the 'Sale of a Property'. (P1)

'So it started with him [supervisor] asking me if I could ring and find out whether they [purchaser's solicitor] were ready to exchange. I had to also get in touch with our client to get information from them' [and] 'there were other things that the client would ask me for advice on, it was hard cause as a trainee you don't know like did he contact the other side, the other client, or should I deal directly with the solicitor on that to try and get things resolved'. (P2)

Trainee 5's roles resulting from this task were: negotiator, with the other solicitor to arrange an exchange date; advisor to the firm's client; and learner of procedures such as who should contact who, in addition to finding out the required information to enable the exchange to proceed. Overarching all of these roles is Trainee 5's role as trainee and as such a 'learner' in context.

One of the tasks Trainee 2 has been involved in also suggests her undertaking a range of roles including; advisor [to client, landlord], negotiator [where the parties involved come back], and learner [being trained up], in addition to that of drafter [of licenses]:

'when I first started they train you up on ... they give you the residential stuff just to get started and find your way round and get used to handling transactions on your own. Slowly I have been given more commercial style leases and transactions like that to do with ... licences to assign where we act for the landlord and he leases out one of his properties, maybe a shop or something, and the tenant wants to assign it to somebody else then you have to get the landlord's approval to do so I'll help those transactions along because they are quite simple, it is standard document that you have to amend and put in the correct parties plus we negotiate it if people come back to you.' (P9)

For Trainee 6:

'one of the major things that I have been involved in is ehm a potential compulsory purchase order of some land for some clients – so I have been involved right from the beginning although we haven't actually made the order – but I think we are hoping to in the next few weeks – so a lot of that has been involved in the draft stage – quite a few meetings and writing instructions to council, it has been quite big altogether.' (P3)

Although not as clearly expressed it can be seen that Trainee 6's task was a 'potential compulsory order' and involved her not only in the role of drafting [documents] but also as an advisor to council [writing instructions to council]. Her role in her attendance at meetings is not made clear here but it would suggest that of learner as later in her interview she notes:

Trainee 6 - 'but like we had quite regular meetings to discuss how things were going and who was doing what.' (P4)

Trainee 1's involvement in residential conveyancing suggests her undertaking roles as 'learner' [of procedures, how to approach purchases and sales], advisor [to clients] and drafter [of sales and purchase documents].

Trainee 1 - 'but now I'm dealing with my own clients and a lot of residential sales and purchases - related sales and purchases so you are sitting in the middle of a chain or whatever which gets quite complicated (laughs) and people are ringing you from both ends. Saying we want to do this then, you know?' (P6)

1.2.1 In Summary

From the above analysis of the theme 'roles' key shaping themes emerging are; 'task related roles', 'size of task' and 'parallel nature of knowledge and information'

In their role as trainees, Trainee 5, Trainee 2 and Trainee 1 were given what would appear to be straightforward tasks, Trainee 5 to complete an exchange, Trainee 2 to draft a licence and Trainee 1 the buying and selling of residential properties, however, Trainee 6's task, a compulsory purchase order, would appear to be more complicated in that it required a team of staff to be involved in working towards task completion. Despite this difference, empirical evidence suggests that the tasks themselves indicate the need for more than one role to be enacted.

Empirical evidence also suggests that the number of roles enacted as part of a task, would appear to be influenced by the 'completeness' of the task, whether the task can be viewed as complete in itself, for example, the sale of a property, or partial, in that the task forms part of a larger file matter. Furthermore, this completeness of task and the resultant number of roles is suggested as increasing the trainees' need for information and knowledge to meet the various activities involved thereby furthering the potential for knowledge development.

Empirical evidence further suggests that both the tasks and the roles resulting from these tasks potentially require more than just information but knowledge. There is a need not only to find out about, for example, what is involved in a compulsory order or in the buying and selling of property, but a need to know how to go about completing a compulsory order and the buying and selling of property. This know-how suggests more than simply acquiring information on what to do, but how to do it, in acquiring knowledge of processes and procedures. In addition, it is likely that when speaking to clients or instructing witnesses or agents, the trainee is bringing to bear more than the information to be communicated, but an understanding of what is being communicated and how to communicate it, and is therefore bringing knowledge to the situation. All of this suggests that information and knowledge are inextricably linked when it comes to the performing of tasks.

This summary highlights the potential for multiple roles to be performed by the trainees when undertaking a single task and as a result of these roles, the potential need to acquire differing information and knowledge throughout the various stages of the task. This would suggest that the performing of a single task is more complex than its initial nature implies. However, is it the additional roles that lead to a task being perceived as more complex or do other factors come into play? This notion of 'complexity' is explored further.

1.3 Are tasks more complex than their initial nature implies?

Although tasks allocated to the trainees might appear to be fairly routine in that they do not suggest in themselves complexity, when considering additional factors such as the range and type of roles that

result from undertaking the task, and the therefore potential range of needs, both information and knowledge, is it not likely that the task can become more complex?

1.3.1 Roles can result in complexity

The roles enacted by the trainees can be said to reflect the multiple realities of the initial task as the task is itself composed of many parts and is not always as straightforward as its initial nature would suggest, and therefore the task can be said to have the potential to become more complex.

However, the tasks and their resultant roles do not fully explain why some tasks are perceived as potentially more complex. Additional shaping factors are suggested by the narratives as being; unfamiliarity; familiarity; nature of task; discussion; and skills development.

1.3.2 Unfamiliarity can lead to a perceived difficulty

Trainee 5 is new to the Property seat and therefore unfamiliar with the workings of the seat, lacking knowledge regarding procedures, finding it 'hard' (P2) and as such can be said to perceive the task as being more complex.

1.3.3 Unfamiliarity can lead to uncertainty

Trainee 6's overarching task, a 'compulsory purchase order', would suggest more complexity as it required a team approach, but on considering her tasks within the overall task, she has, as Trainee 5, Trainee 1 and Trainee 2, differing roles to play and as a trainee will be given more trainee type tasks such as that of drafting a document;

Trainee 6 - 'I think it first all started when we had a meeting and they were like –well - could you try drafting the documents, but the documents are all – you have to do them in specified documents, and they are referred to in the regulations – and they referred me to them – we have like precedents to work from and so that wasn't too bad.' (P5)

As with Trainee 5, Trainee 6 is new to Property and is also new to the task of completing a compulsory order. It would appear from the narration that in addition to being unfamiliar with the task given to her, she is also experiencing some uncertainty as to her ability to do the task, '*but the documents are all, you have to do them in specified documents*' (P5) suggesting that the task is more complex from her perspective. This uncertainty gives way to feelings of increased certainty as to how to approach the task on the identification of existing precedents, '*so that wasn't too bad*'. (P5)

1.3.4 Unfamiliarity can lead to a perceived difficulty and feelings of uncertainty resulting in the task potentially being perceived as complex

Trainee 2 experiences some difficulty in undertaking her task of following and learning procedures within Commercial Litigation, further suggesting elements of complexity;

Trainee 2 – 'one of the main things you have to do in litigation is document disclosure' [and] 'but the rules are quite difficult to understand and it is not always actually straightforward and I find that although its really common tasks that trainees get to do, but it's actually quite difficult to do unless you know the file because it is difficult to know; is this relevant? Is this going to be privileged or I mean you know the basic idea of privilege but even still you are not quite sure,' (CLP11)

In addition, as the trainees within Commercial Litigation undertake small tasks on a larger file matter and as these matters often last longer than the trainee's seat of training, then it can be difficult for them to come to know the full history behind the case. This can be seen to result in the trainee perceiving the task to be more difficult, having a direct influence on their need to know and therefore their ability to carry out the task. The task can therefore be said to be more complex from the perspective of the trainee.

Trainee 2's narration also suggests feelings of uncertainty, despite having knowledge of what is meant by disclosure and privilege she remains unsure.

1.3.5 Familiarity can alleviate complexity

Trainee 2's task within Property is the drafting of documents, a task often given over to trainees (Goriely & Williams, 1996):

Trainee 2 – 'when I first started they train you up on ... they give you the residential stuff just to get started and find your way round and get used to handling transactions on your own. Slowly I have been given more commercial style leases and transactions like that to do with ... licences to assign where we act for the landlord and he leases out one of his properties, maybe a shop or something, and the tenant wants to assign it to somebody else then you have to get the landlord's approval to do so I'll help those transactions along because they are quite simple, it is standard document that you have to amend and put in the correct parties plus we negotiate it if people come back to you.' (P9)

In this instance, there is no indication of Trainee 2's roles resulting from the task, (advisor [to client, landlord], negotiator [where the parties involved come back], and learner [being trained up], in addition to that of drafter [of licenses]), suggesting any real complexity from her perspective. This difference can be partially explained by the fact that Trainee 2 is not new to the Property department:

Trainee 2 - 'so because I had done a seat in property before, rather than treat me as a trainee and just get me to do the registrations and the research, they actually gave me quite a lot of responsibility which is good because you learn a lot quicker.' (P12)

Trainee 2, having worked in property before, brings actual work experience to the seat, and as such is more confident about, and familiar with, some of the work. This, however, does not necessarily suggest that her tasks are indeed perceived as routine or not complex as Trainee 2 emphasises her continuous learning:

Trainee 2 – 'And I feel as though I am learning a lot quicker as well because you are expected to land on your feet and get on with it. And because you are learning it you remember everything that you have done so you really do feel as if you are learning everything all the time, very quickly, because you have to, and that is rewarding. And then when you get it the next time you can do it because you have done that before and you can just go right through it.' (P13)

'When you get it the next time you can do it because you have done that before and you can just go right through it' does suggest an element of uncertainty when first faced with the task, and the resultant need to 'learn' how to carry out the task could indicate that the task might initially be perceived as being more complex than routine, by the trainee. However, there is no real evidence of this trainee experiencing any real difficulty, indeed, it is evident that being 'expected to land on your feet and get on with it' does not phase the trainee, in fact she would appear to revel in the opportunity to learn in this way, finding it 'rewarding'. This 'attitude' is perhaps indicative of the increased confidence of the trainee as a result of her prior experience in that seat.

Although Trainee 2 does have previous experience of the seat and thereby previous knowledge of how things are done in that seat, it is not necessarily true to say that the other trainees bring no experience to the seat as all trainees will have studied aspects of Property law and Commercial Litigation at University and, or, on the Legal Practice Course. However, when asked to reflect on that experience, where in some instances the trainees were found to clearly attribute their knowledge of how to do things to their education at University or the Legal Practice course, for others, there was a certain amount of uncertainty, for example;

Trainee 1 clearly links her knowledge of the drafting of leases to the Legal Practice Course:

Trainee 1 – 'I happened to study landlord and Tenant as an option, ehm, so I do know, again it was a short, it was on LPC, it was a short period of teaching Again it was the basics, you don't go into convoluted leases about various things cause they can go on for 100s of pages. But in short the basics are; your repair covenant, things like that, so I was taught those which was quite fortunate.' (P15)

Trainee 6, when faced with the task of researching into agricultural tenancy, also links her knowledge to education, in this case University, but expresses an element of uncertainty:

'I had to do some research – it was in relation to something like agricultural tenancy – I'd never done anything like it before ever, so ehm, I started - I used Halsbury's Laws' (P16)

Researcher – 'So how did you know that Halsbury's would be a good starting point?'

Trainee 6 - 'Ehm – I don't know – probably just from University days – I just know that Halsbury's kind of deal with everything.' (P17)

Trainee 6 does not know or is not able to fully express how she knew that Halsbury's would be a good starting point but makes the assumption that she learned this at University.

Trainee 5, on the other hand, is uncertain about how much one brings from education;

Trainee 5 - 'I wouldn't say quite a bit, it's really hard actually to work out how much knowledge you really have because last year I got 90% in my conveyancing exam. But I came here and thought I really don't know that much. I don't know if it is to do with exams that it all goes in and is easily lost again or whether there is a difference between academic and practical. The degree is more sort of academic law – the legal practice course is supposed to be a bit more practical but it was quite, you know, specific scenarios to that course compared with what you do but obviously it does help. And it probably helps more than I think it does'. (P14)

Trainee 5 and Trainee 6's reflections demonstrate how difficult it can be to realise what one knows, or to know how one comes to know what one knows. Trainee 6 assumes that she knew about Halsbury's as a resource from University and logically Trainee 5 acknowledges that all experiences have contributed to her knowledge, but what is not known to Trainee 5 is the extent to which her experience in education contributed to her knowledge development in the subject. As with trainee 2, who found that despite bringing prior experience of Commercial Litigation procedures from the Legal Practice Course, practice within the context of the firm was different, Trainee 5's reflection also suggests that what is learned at University or on the Legal Practice course is not necessarily perceived as being directly transferable to what happens in practice.

This would suggest that whereas in some circumstances it might be clear to the trainees how they came to know what to do, linking that knowledge to their educational studies in law, how they come to know what to do would appear to become more blurred as they spend more time in practice. Familiarity with, and experience of, Property Law and Commercial Litigation gained prior to the seat, through, for example, their time in education, potentially becomes embedded within their experiences gained through working within the firm. In addition, this experience, gained prior to the seat, is not necessarily perceived as being directly transferable to practice and as such indicates the need for further learning in these areas in situ. It is possible that it is this further learning in situ that leads to the building up of the confidence of the trainee.

For Trainee 2, the actual experience of the seat appeared to make a difference when it came to demonstrating confidence and how the unknown was perceived. This is evidenced by considering Trainee 2's narration in Commercial Litigation with that of her narration in Property. Whereas Trainee 2, having prior experience of Property, was found to be more than confident in undertaking new tasks within Property, clearly thriving on the unknown and finding the learning experience rewarding, she is less so in Commercial Litigation, where she has no prior experience, except that from University, of the seat, finding *'the rules difficult to understand'* (CLP11) and *'not always straightforward'* (CLP11) suggesting experiencing some difficulty in undertaking the task, and potentially perceiving the task to be more complex.

1.3.6 The nature of the task can suggest complexity

Trainee 1, whilst in Property, suggests elements of complexity indicating that *'sitting in the middle of a chain'* can be *'quite complicated'* (P6). Here complexity would appear to be as a result of the various elements involved in the task of buying and selling property.

1.3.7 The need for discussion can suggest complexity

Trainee 1 and Trainee 2, emphasise the discursive nature of work within Commercial Litigation;

Trainee 1 – ‘And [the partner] is the type of person that if she is finding it difficult to get her head around something she will ask if she can discuss it with me just to get my thought process worked out, which is really beneficial to me because I can then understand where she is going, where the thought process should be going if you are trying to work out whatever.’ (CLP15)

Trainee 2 – ‘what’s quite good about the partner that I share with is that he tends to talk about even cases that I am not involved in. He will talk about them with me and we’ll discuss the tactics involved and what the next step will be. Cause it helps him, he can talk about it and it helps him sort of formalise it in his mind and it helps me cause I can realise that’s what he would do in that situation, so you learn from that as well so it’s quite good.’ (CLP140)

This need for discussion to aid in the formalisation of tasks and the appropriate steps to take, suggests that there is the possibility of taking different tactical approaches in working towards a possible solution and as such does not suggest that tasks are necessarily routine and can therefore be considered to be potentially complex.

This use of discussion can also be seen as contributing to the trainees’ knowledge development. The partners are resources of information and knowledge and through the discussion of matters enable the trainees to learn about the facts of the matter (information) and the processes involved (knowledge).

1.3.8 The need for further skills development can suggest complexity

Recognition of the need for the development of skills in tactics, negotiation, professional ethics, and communication can also be interpreted as being indicative of task complexity.

Within Commercial Litigation the nature of the work suggests the need to know procedures;

Trainee 2 – ‘Basically in litigation it is all governed by the civil procedure rules which they were recently reformed, 98 I think by Woolf, who reformed them all so and they are all contained within the White Book’ (CLP8)

Familiarity with these procedures was also identified in relation to having the ability to develop further skills;

Trainee 2 – ‘Cause you really have to understand the steps involved before you can start thinking about the tactics and negotiations that sort of thing but you also get introduced to that on the LPC, ehm, so it is just a question of, you know the basics when you start as a trainee, but then a) you are putting it into practice which is completely different and b) actually having to go back to the white book and refer to it in much more detail.’ (CLP9)

Although the procedures are set out in the White Book, it is clear that this in itself is insufficient and that there is a need to supplement knowledge of procedures by developing skills in tactical thinking and negotiation. In addition, despite bringing prior experience of the procedures from the Legal Practice Course (LPC), Trainee 2 suggests that putting this knowledge into practice within the context of the firm is different and that there is also a need to refer to the key resource in more detail. All of this suggests that Trainee 2 is bringing to bear her existing knowledge and experience of the procedures to establish what she knows (certainty), in order to establish what she does not know, (uncertainty). However, uncertainty here is more than identifying what one does not know and therefore a need to find out, for example, through reference to the White Book, but an indication of a need to develop skills in tactics and negotiation.

This need to develop skills is further highlighted by Trainee 1, who, when considering establishing a client’s case, a stage in the procedures within Commercial Litigation, identifies the need for the development of professional skills;

Trainee 1 – ‘you’ve got to get away from your personal reaction to something and get it back to a professional reaction to something. That does take practice because your initial... if somebody is upset you want to sympathise with them. You are to an extent but there is a real risk of then saying “oh I’ll sort it out, it’s alright” and you can’t! You’ll walk out of the room and think “oh what have I just said?” So it’s just that you have got to get away from your personal reaction to being “I’m in work,

I'm a business person" which is difficult to start with, you've got to put a different head on. Again that takes practice and you can't learn that from somebody else.' (CLP16)

This suggests that Trainee 1, in addition to bringing to bear her existing knowledge and experience of the procedures to the task, needs to not only know how to deal with clients, but to be aware of her own personal traits in reacting to client situations and recognises the need to develop skills in professional standards of conduct.

All of this suggests that it is not simply a case of identifying and acquiring the knowledge required, i.e., the procedures to be able to carry out the task, but of identifying the need to develop associated skills. This need for the trainee to develop skills in tactics, negotiation and professional behaviour is therefore suggestive of task complexity.

1.3.9 In Summary

From the above analysis of the theme 'task complexity' key shaping themes are; 'task related roles', 'unfamiliarity', 'familiarity', 'nature of the task', 'discussion' and 'task related needs'

The roles enacted by the trainees can be said to reflect the multiple realities of the initial task, and as such the task is itself composed of many parts and is not always as straightforward as its initial nature would suggest, and therefore the task can be said to have the potential to become more complex.

Unfamiliarity due to; being new to the seat, to a lack of knowledge; to feelings of uncertainty in ability; to uncertainty in knowledge, were identified as potentially increasing task complexity as perceived by the trainee.

Familiarity with work within the seat of training was identified as contributing to an increased confidence in the ability to approach new tasks and as such familiarity can be posited as alleviating complexity. However, all trainees will have had some prior experience of Property law and Commercial Litigation at University or through the Legal Practice course and as such cannot be said to have no experience or to be unfamiliar with these areas of law. This familiarity, however, in some instances, was difficult to realise in terms of 'how one comes to know what one knows' suggesting that what has been learned at University or on the legal Practice course potentially becomes embedded within the new experiences gained through working within the firm. Furthermore, this learning or knowledge gained at University or on the Legal Practice course is not necessarily perceived to reflect the situations met in practice, suggesting requiring further learning in situ, the further practicing of what has been previously learned in situ. It is suggested that it is perhaps this further learning or practice in situ that leads to the building up of confidence in the trainee and potentially how the unknown, for example, new tasks, are perceived, thereby potentially alleviating complexity.

The nature of the task itself, potentially consisting of a number of intertwined stages can suggest elements of complexity.

Discussion in aiding the formalisation of tasks and the appropriate steps to take when performing the task indicates the possibility of taking different tactical approaches in working towards a possible solution and as such does not suggest that tasks are necessarily straightforward, and can therefore be considered to be potentially complex.

Discussion was also found to contribute to knowledge development. The partners are resources of information and knowledge and through the discussion of matters enable the trainees to learn about the facts of the matter (information) and the processes involved (knowledge).

The performing of a task can suggest the need to not only identify and acquire the information and knowledge required, i.e., the procedures to be able to carry out the task, but of identifying the need to develop associated skills. This need to develop skills in, for example, tactics, negotiation and professional behaviour is therefore suggestive of task complexity.

The need to act additional roles, other than that of learner, lead to an exploration as to whether these roles, in the performing of a task, resulted in that task being perceived as more complex than its initial nature suggested. It was found that this notion of complexity was not limited to the roles played but

was also shaped by a range of additional factors. The roles played combined with the identified shaping factors were found to be indicative of the trainees' existing knowledge and their potential knowledge and information needs, and provide further evidence of the relationship between knowledge and information. But how did the trainees perceive these tasks on initiation? Why did they think that they were given these tasks to perform?

1.4 How do trainees perceive the tasks they are given?

The information and knowledge needs of the trainees are likely to start with the initiation of a task. An exploration of the initiation of such tasks was found to be revealing, providing an insight into the perceptions of the trainees, their feelings in being faced with a task.

Commercial Litigation and Property revealed differing perceptions and interpretations, perhaps due to the nature of work, and the size of tasks encountered by the trainees, and as such these have been separated below.

Within Commercial Litigation a range of perceived factors were identified by the trainees and included; a perception that the supervisor already knew the answer; situation; size of task; the nature of the tasks, being procedural or complex research points, difficult, or costly.

1.4.1 The supervisor already knows the answer

Trainee 4 feels that the solicitors already know the answer to the questions he is initially asked to research into:

Trainee 4 – 'one of the first jobs to get you into the swing of things is to research the basic points, which I think as well they know the answer to already. They are just giving it to you to do. I think this is quite common and they already know the answer but they just want you to confirm it for them, my supervisors.' (CLP28)

Trainee 4, despite appearing to understand and accept why he is initially given basic points to research, perceives that he is just being asked to confirm points that his supervisors are already aware of, and would appear to be expressing disappointment at this. This is an interesting point as it suggests that perhaps he does not as yet perceive the work that he is doing to be of great value, and as such it suggests that he is not as yet au fait with the workings of litigation and the need to ensure and confirm the accuracy of the points being made. As noted above (section?), Trainee 2's reflection on work within litigation suggests that there is a need to ensure and confirm accuracy in litigation work, and this might explain why Trainee 4 has been asked to confirm certain points.

1.4.2 Situation, Size of Task and Opportunity

Trainee 1 indicates size of the task as being influential, suggesting that she was given increased responsibility because the tasks were perceived to be small enough for her to handle;

Trainee 1 – 'I was quite lucky, quite a few new cases came through the door that were small enough for me to handle, so I got control of those cases, obviously with supervision' (CLP30)

Trainee 1 also expresses 'luck' at arriving at the right time, suggesting that this is seen as a bonus when compared to the smaller tasks that the trainees in litigation are usually given to handle (CLP1). There is also the further suggestion of the opportunity for Trainee 1 to acquire a broader experience, seeing them as cases and not simply small tasks that form part of a larger matter. Despite this increased responsibility, however, it is unlikely that Trainee 1 will see these tasks through to the end due to the nature of work within Commercial Litigation (CLP6).

1.4.3 Situation, Status and Opportunity

For Trainee 2, it is because she is sitting with her supervisor, who is a partner and the fact that she also carries out work on behalf of another partner;

Trainee 2 – 'I sit in with my direct supervisor who is a partner. And he has got me quite involved in lots of files' [and] 'I also work for the head of department who is also a partner and he has let me get involved' [and] 'he tends to have bigger cases' (CLP31)

Trainee 2 perceives herself to be fortunate to be working with and for partners, the suggestion being because of their status within the firm, they are perceived to be working on many, or bigger matters and as such Trainee 2 has the opportunity to become more involved.

1.4.5 Nature of task

Trainee 3 suggests that she has been given certain tasks because they are procedural and others because they involve complex points of law;

Trainee 3 – 'I don't get much research to do for litigation but what I do get tends to be quite complex legal points – because it is either procedural, like how many copies of this do you need to file at court or what's the line spacing got to be on this document, things like that. Or if it is proper legal research it's really complicated and it will be some really bizarre point of contract law that one of the partners has looked and couldn't find and then ask me to have a stab at it' (CLP32)

The procedural nature of the given tasks would not appear to be unusual as both Trainee 2 and Trainee 1 also mention the learning of procedures in relation to the tasks they were allocated within litigation. (CLP2/CLP9) However, Trainee 3 perceives the legal research she is asked to do as unusual, qualifying this with the point that she has been given the task because a partner has not been able to find it, which does suggest a certain complexity, if difficult to find. It is interesting to consider Trainee 3's perception of why she has been given some legal research, with that of Trainee 4, who felt that the solicitors already knew the answer but wanted confirmation.

Trainee 3 also suggests that she is given tasks that are too easy for the partners to carry out and those that she considers would be too expensive for the client if carried out by a more senior member of the firm;

Trainee 3 – 'Well I'm cheap and so I get the low value work to do. If a client comes into litigation and it's not worth that much money they'll make me do it because it keeps the cost down and there's no point in incurring loads of cost by a partner dealing with a little matter' [and] 'I do the work that is just too easy for a partner or an associate or an assistant to do. There is absolutely no point in them drafting an easy letter to the other side or something, there's no point in them filing things at Court, I get given that cause it's easy. That's it really – cheap, easy.' (CLP33)

The portrayal of being 'cheap' and 'easy' is of course in good humour with no sense of disappointment in her narration but it can be interpreted as stereotypically describing the role of trainees.

In contrast, within the Property seat, the factors identified surrounding task initiation included; confidence in the trainee; typical trainee task and busyness of seat.

1.4.6 Confidence in Trainee

Trainee 5 – 'I thought he was giving me it cause he just hadn't got round to ringing them up just to sort of find out where we are with it. And I think cause I had done it with one of the ones previously and I had the guy on the other side of that giving me quite a hard time but then he had rung up to apologise and he rung up the partner to apologise for giving me such a hard time and that worked out okay so I think that's why he passed on other things as well.' (P18)

Here Trainee 5 indicates why she thinks she was given the task, on the one hand because she thinks that perhaps her partner just hasn't got round to contacting the purchaser's solicitor and on the other because she has dealt with a similar case previously and that despite being given a 'hard time' by the client, it all 'worked out okay'.

We can interpret Trainee 5's experience as being mixed in feelings, in that she is expressing 'uncertainty' as to why she was given the task, but at the same time she is also expressing 'increased confidence' and therefore an increased 'certainty' in her ability to handle the case, because her dealings

with a previous client had worked out okay. Feelings of confidence are also supported by her thoughts regarding why her supervisor had passed the task to her *'so I think that's why he passed on other things as well'* suggesting increased confidence on the part of her supervisor about Trainee 5's abilities, which further instilled confidence in Trainee 5, to feel able to do the task.

Despite perhaps feeling able to undertake the task, Trainee 5 perceives the task to be 'difficult', this would appear to be mainly because of the problems in getting the purchaser's solicitor to respond.

'It was difficult cause, cause works had to be done, it was a charity that was buying and a surveyor's report had to come through and there was various things that they had to tie up before they could exchange and it was really trying to get the purchaser's solicitors to respond because he was really non-responsive and it was really kind of that, that was difficult and the partner had found it difficult to deal with him to get any sort of feedback from him. It was really just trying to get a response out of him, finding out when he was going to do whatever he was going to do.' (P19)

Trainee 5's feelings of 'difficulty' are further re-enforced with her acknowledgment that *'the partner had [also] found it difficult to deal with him'*. Both Trainee 5 and her supervisor, as a result of the task and similar findings, have created a shared confidence regarding the purchaser's solicitor and in the 'difficulty' of trying to get a response. This shared interpretation that a difficulty exists is likely to have had some influence on Trainee 5's attitude to the task, to not being totally discouraged by this lack of a response, it being expected and this expectation confirmed by her supervisor.

1.4.7 Typical Trainee task

Trainee 2, whilst in Property, provides us with a range of explanations as to why she perceives she was given certain tasks from what she considers are typical beginner tasks to *'train you up'*, *'get you started'* and *'find your way around'* (P35), to what she considers are typical trainee tasks such as research into land registration and research into new laws regarding stamp duty:

'I have been involved in a few of the bigger projects with one of the partners and on those you get little bits and bobs to do, just helping the transaction along such as if there is research to be done as to how to register something at the Land Registry then that is a common trainee thing to do, so I'll be doing things like that, or stamp duty and new laws just started on that so that is a common trainee thing to do because none of the actual fee earners knew their way around it yet because it is quite new.' (P36)

Trainee 2 also suggests that she is given tasks such as research into new laws on stamp duty, purely because they are new and her perception is that the fee earners [solicitors] will not yet know their way around them. Trainee 2 also feels that her prior experience, coupled with that fact that there are other 'junior lawyers' within the seat, as a reason why she was given more responsibility:

'I don't have so much research to do in this seat because when I came to the department they were quite a few junior lawyers down so because I had done a seat in property before, rather than treat me as a trainee and just get me to do the registrations and the research, they actually gave me quite a lot of responsibility which is good because you learn a lot quicker.' (P37)

Increased responsibility is an indicator of the confidence that the solicitors have in Trainee 2, as a result of her prior experience and their knowledge of her prior work.

Trainee 6 is also given what is considered a typical task for trainees to do, the drafting of documents:

Trainee 6 - 'I had obviously heard of compulsory purchase but I didn't know anything about the law. I didn't know anything about the procedures or anything and ehm - I suppose I was helped out - I think it first all started when we had a meeting and they were like -well - could you try drafting the documents but the documents are all - you have to do them in specified documents and they are referred to in the regulations - and they referred me to them - we have like precedents to work from, and so that wasn't too bad.' (P24)

As was found with Trainee 5, Trainee 6 can also be seen to be experiencing mixed feelings. However, the situation and context of these feelings are different. Whereas Trainee 5 was thought to be 'uncertain' about why she had been given the task, we can interpret Trainee 6's lack of knowledge of

the law and procedures as indicating feelings of uncertainty, being new to that particular subject. Whereas Trainee 5's expression of confidence and increased certainty was related to prior experience, Trainee 6's confidence and increased certainty should perhaps be interpreted more in terms of optimism, in that she was being directed to the resource that she should refer to, i.e., the precedents, which will also guide her in drafting the required documents.

Despite some optimism about carrying out the task, Trainee 6, like Trainee 5 experienced some 'difficulty':

Researcher - Was it easy to know then what to do when you had the example precedent?

Trainee 6 - 'Yeah - pretty much so because - well - no - in saying that, it was easy in that you knew its got to be very precise so you knew what details you needed and but then - so you can put some of the basic details in about whereabouts this land concerned is, what they are wanting to do with it, what the name of the company is called, who objections should be sent to, things like that were really basic but then I mean part of it I didn't know how to do. I mean there was like a table there to put information in and that was, I mean really I didn't know enough about the site, and I didn't really know how to, how to phrase things almost or how official, you know what type of language you are supposed to use. So I think I went to see one of the partners who has done a few before about that.' (P25)

Trainee 6's difficulty, as it was with her initial uncertainty, is due to her lack of knowledge, in this case not only of procedures but also of the appropriate language to use.

1.4.8 Busyness of Seat

Trainee 1 emphasises the busyness of the seat and suggests this as the reason why she was given certain tasks:

Trainee 1 - 'the whole department is busy and I think it was sort of oh great trainees in and at one point I ended up and I had 6 people asking me to do some work' (P27)

Linked to the amount of work that was required, Trainee 1 faces uncertainty, not in relation to what she has been asked to do, but in relation to her ability to cope with the amount of work she was being asked to do:

Trainee 1 - 'eventually I had to say no - I can't do it - there's a limit to how much a human being can do in a day - I said you either give it to me and it gets done badly or you don't give it to me cause I physically can't do that amount of work. I remembered at the time saying that and thinking should I have said that, as a trainee should I have said that? I thought about it and I said no you've got to otherwise they are going to be looking upon you really badly going gosh you haven't done that yet, or three weeks later oh why didn't she say at the time?' (P28)

Trainee 1 reflects on whether she should have said what she said, demonstrating feelings of uncertainty. These feelings quickly change to that of confidence and increased certainty in her own judgment and suggests a 'bringing to bear', at that time, an awareness and understanding of the consequences of not acknowledging her ability to cope with the workload. Linked to this Trainee 1 is highlighting her feelings of concern as to how others might perceive her if she was not to question the amount of work she was being given. In addition Trainee 1 is demonstrating an understanding of herself; she is bringing to bear at that point in time her knowledge; and her perception of, her own abilities in relation to what she realistically feels she can cope with:

Trainee 1 - 'And I think that knowing your own limits, knowing when to say no' (P29)

Trainee 1's concern as regards the number of tasks being allocated to her is also indicative of feelings of difficulty in coping and of being overwhelmed by it all:

Trainee 1 - 'in your first month you're going, oh my... files and files, and you think woo!' (P32)

Trainee 1 also links her belief that she has made the right decision to say 'no' to learning.

Trainee 1 – ‘So again I think that again is something that, valuable to learn, at the end of the day we are trainees and we’re almost bottom of the pack and you’ve got to be able to say at some point, hold fire, and it wasn’t them being just oh trainees pile the work on, it wasn’t at all’ (P30)

Trainee 1’s example provides some evidence of a lack of understanding amongst staff within Property as to what the trainees might be working on, suggesting a potential lack of communication across the department as a whole:

Researcher – ‘They wouldn’t know what everyone else had given you?’

Trainee 1 – ‘No they didn’t have a clue that I was sitting working for how many and when I said, you know can we hold fire a minute I’m working and they said, you’re doing what for, oh my goodness right okay, don’t worry about it.’ (P31)

1.4.9 In Summary

As a result of the above analysis surrounding the key theme ‘Task Initiation’, emerging shaping themes are, ‘situation’, ‘opportunity’, ‘nature of task’, ‘typicality of task’ ‘confidence’ ‘nature of work’ ‘uncertainty’, and ‘difficulty’.

No two shaping factors are exactly the same, a potential indicator of the range of tasks and potential experiences that the trainees will gain as part of their training period within the firm. These shaping factors are further indicators of the potential differing learning experiences and these learning experiences, in the form of the tasks that they are given to undertake, will shape their information behaviour and knowledge development.

Within the Commercial Litigation seat, despite no two shaping factors being the same, two three sub categories were identified in relation to the key theme of ‘Task Initiation’, that of ‘situation’, ‘opportunity’ and ‘nature of task’.

For one trainee the shaping factors were found to be potentially dependent upon situation, status of the solicitor and opportunity. Trainee 2 is in the Commercial Litigation seat [situation] and sits with [situation], and carries out work for her supervisor who is not just a solicitor within the firm but a partner [status]. She also carries out work for another solicitor, who is not only a partner but is also the head of the Commercial Litigation seat [status], which makes it possible for her [opportunity] to become more involved in, and therefore learn from, larger case matters.

Situation, size of task and opportunity were identified in relation to Trainee 1, who, due to being in the right place at the right time, felt lucky to be given what are suggested as being ‘whole’ cases to handle, thereby providing her with the opportunity to acquire a more complete learning experience.

The nature of the task was identified as a shaping factor in relation to Trainee 3. Tasks were allocated because they were perceived as more procedural, unusual or easy, thereby offering the trainee with a mixture of experiences and therefore differing learning opportunities.

Situation and perception were identified in relation to Trainee 4. The situation of the trainee, being new to the seat, results in his being given the task of researching points of law. However, as Trainee 4 perceives that the solicitors already know the answer to the point of law, he appears to express disappointment. This perception and disappointment could potentially influence the trainee’s motivation to carry out the task or similar tasks, to influence how he goes about the task and as a result his learning from the task.

Within the context of the Property seat, a further range of shaping factors was identified in relation to task initiation. Although, as with Commercial Litigation, no two shaping factors were exactly the same, five key shaping conceptual themes, ‘typicality of task’ ‘confidence’ ‘nature of work’ ‘uncertainty’, ‘and ‘difficulty’, were identified.

Confidence, uncertainty and difficulty were identified in relation to Trainee 5. Trainee 5 experiences uncertainty as to why she was given the task, offering two differing explanations. On the one hand she feels that the partner just hasn’t got round to contacting the purchaser’s solicitor but on the other she

acknowledges that it could be because she has carried out a similar task before, and despite some difficulties, successfully completed the matter. This latter explanation demonstrates an increased confidence on the part of the trainee, in her own ability to undertake the task having carried out a similar task before, suggesting that she feels she has learned from prior experience. An increased confidence on the part of the partner, in the trainee's ability to undertake the task, having successfully completed a similar task before is also indicative that he/she perceives that the trainee will have learned from that experience. Despite this increased confidence Trainee 5 experiences difficulty in dealing with the other solicitor, but as a result of a shared confidence between the solicitor and the trainee that the purchaser's solicitor is indeed 'difficult' to work with, Trainee 5 is likely to be better able to deal with this difficulty and to further learn from the experience. Confidence can be posited as contributing to why a trainee is given a particular task; to a trainee's ability to tackle a task; but is also likely to shape the trainee's learning.

Typicality of task, uncertainty, confidence and difficulty were identified in relation to Trainee 6. Despite the typicality of the task, Trainee 6 experiences uncertainty due to a lack of knowledge of the law and the associated procedures having no prior experience of this area, but becomes more confident as to what to do, feeling optimistic, on being directed to the resources to be used. Trainee 6 experiences difficulty due to her lack of knowledge, not only of the law or of the associated procedures but of the language to use. Direction as to where to go increases the trainee's confidence in being enabled to learn how to do the task and to overcome her lack of knowledge.

The nature of work, uncertainty, confidence, perception and difficulty are identified in relation to Trainee 1. The seat is very busy and Trainee 1 experiences uncertainty in relation to her ability to cope with the amount of work she is given to do. Due to her lack of experience as to what is acceptable behaviour for a trainee, she worries about whether to question or not the amount of work she is being given. She becomes more confident as she begins to trust in her own judgement, deciding to say no to the demands being placed on her, despite concerns as to how she would be perceived by others. Difficulty in relation to Trainee 1 is as a result of her initial feelings of not being able to cope. The nature of work, being so busy, is suggested as influencing the trainee's ability to cope with the work which in turn will shape her approach to tasks and her knowledge development, not being able to do the tasks thoroughly '*either give it to me and it gets done badly*' (P28).

Typicality of task and confidence were identified in relation to Trainee 2. Trainee 2 outlines a range of typical trainee tasks but in contrast to the three trainees discussed above, Trainee 2 does not express any great degree of uncertainty or difficulty, despite being given new legislation to research. This can be explained by her prior experience in the seat, this experience suggesting an increased confidence in her ability to do the work, to tackle the unknown and therefore to learn.

Within the Property seat, perhaps because of the types of tasks, being more 'complete' in nature and therefore resulting in more detailed narrations, a clearer picture of the information and knowledge needs of the trainees is beginning to emerge. Trainee 5 needs to learn how to deal with the other solicitor. Trainee 6 needs to find out and learn more about the legal area, its associated procedures and language and to put this knowledge into practice. Trainee 1 is finding out about what is acceptable behaviour and learning to trust in her own judgement more. Trainee 2, due to her experience, is given more responsibility and acknowledges how this increases her learning.

The perceptions of the trainees as to why they were given certain tasks is revealing in terms of the opportunities they are afforded in the types of tasks allocated, but also in terms of their feelings on being given these tasks and how these feelings change through starting work on these tasks. In addition, for some trainees an indication of their knowledge and information needs as a result of task initiation begins to emerge as does the potential for learning and its variant shaping influences. However, in order to capture their information behaviour and knowledge development in more detail an exploration of how all trainees approach tasks proves invaluable.

1.5 How do the trainees approach the task they have been allocated?

By considering how the trainees approach the tasks they have been allocated, a richer picture of their information behaviour and knowledge development begins to emerge. This section considers the trainees' initial approach to the task.

1.5.1 Trainee 3 and Approach to Task

Trainee 3 reflects on her use of resources in litigation when compared to her time in Property;

Trainee 3 – 'I used to use Halsbury's loads and the books in the library when I was in Property and I am hardly ever there any more. I just don't use it, I think mostly because the litigation books are upstairs on the 3rd floor where I am based it's a lot easier than running down stairs constantly and I just do use the Internet a lot more, we've got Lexis Nexis and we've had various things on trial, Westlaw and things like. I've really got into using those.' (CLP68) [and] 'saves so much time and everything is so up-to-date on it – get recent cases and things.' (CLP69)

Whereas in Property Trainee 3 used Halsbury's and the library more, in litigation she notes using the Internet. Although she is aware of the electronic resources available she does not always differentiate between the specialist databases of Westlaw and Lexis Nexis, and the Internet. Ease of accessibility of the books, being on the floor where she is situated, an increased familiarity with the electronic resources, as suggested by her use statement, time saved and currency are suggested shaping factors.

Trainee 3's decision to search the Internet appears to be as a result of her combined experiences from Law School and from within the firm;

Trainee 3 – 'I used it when I was at Law School but I probably didn't know that much about it. We did have a talk on using the internet here actually. Starsky and Hutch went through how to use it. They didn't really say anything that I didn't know before but they made me think more about using it. They gave me web addresses and we now get a photo briefing of some internet newsletter thing with addresses on.' (CLP35) [and] 'And I've just used it more and if I've been stuck and I take it down to Hutch who has more time than Starsky and see how she has gone about finding something on the Internet just by watching Hutch, and through trial and error, I've learnt myself how to do it I'm sure I've got lots more to learn. I find now that I'm more proficient at it so I use it more.' (CLP71)

Although Trainee 3 used the Internet at Law School (University or Legal Practice Course) she claims not to know much about it and despite an indication of further training in the use of the Internet by the firm Trainee 3 does not consider learning anything new. This could suggest that Trainee 3 has in fact learned more during her time at University than she realises as she clearly has some knowledge of Internet resources, and as such can be said to be bringing to bear her knowledge gained from her prior experiences at University to the current task of finding cases.

The further training provided by the firm is suggested as having encouraged her use of resources available via the Internet and the provision of a current awareness service has increased her awareness of what resources are available to her. In addition, as Trainee 3's knowledge of searching improves her use of these resources increases. Factors influencing Trainee 3's knowledge of how to use the resources are trial and error, frequency of use and observation.

Trainee 3 also demonstrates a confidence in her ability to carry out research;

Researcher – 'So would you have a cut off point if you were searching and then couldn't find anything, would you go down to Hutch if you couldn't find anything after say 5 minutes or would you try to do a thorough search and then go down to Hutch?'

Trainee 3 – 'I'm very thorough myself, I can usually find it, if it is a case then I can usually find it. It just depends on how busy I am if I'm not really busy then I will really look for it, and go to the library, and try really hard but if I was busy I'd probably send Hutch an email and say could you find this for me. She just brings it up and sticks it on my desk.' (CLP72)

The type of research would appear to influence whether Trainee 3 carries out the research herself or passes it to Hutch; claiming to be proficient at case research. In addition, busyness will influence whether she carries out the research herself or passes it to Hutch.

Accessibility and ease of use were highlighted as further shaping factors in Trainee 3's growing preference for the use of specialist legal databases over the Internet;

Trainee 3 – ‘I didn’t have to leave my desk, just logged on, keyed in the name and it came up with about 26 cases and the last one was the 1980 case, so click on that, print it off, no messing around photocopiers. The other cases were ones that referred to the named case and you just scroll down until you see it highlighted in bold, you can see immediately if it is relevant and print it of if it is, take it to the partner and you have done it – really easy’ (CLP70)

When asked to brief council;

Trainee 3 – ‘Brief to council, briefing the barrister that we employ to represent us. How did I know how to do that? It’s quite hard because there is a set format about how to do everything. I think I must have asked someone – let me think – yes I did – I asked the other trainee [name].’ [and] ‘So [name] has been in litigation 3 months longer than me cause I’ve been in employment – so a lot of the time I’ve gone and asked her. And she has either said oh I have done one of those or she’s pointed me in the direction of a file that she knows [the supervisor] did one of those on – so I’ll just go and check out the format and then the civil procedure rules – check those out as well and then basically have a go at doing it myself. The first few times you do it you do a complete mess and then it must get clearer cause you get less scribbles on it when it comes back.’ (CLP36)

Trainee 3, unlike the other trainees, is not sitting with a supervisor and therefore approaches those she feels will know about her task in order to satisfy her need, in this instance another trainee who has more experience of the seat. Having sought guidance as to where to find an example of the format of the task, Trainee 3 then attempts the task herself. Here Trainee 3 does not indicate seeking further help when attempting the task, to check to see if she is doing it correctly, but does appear to learn from the feedback in the form of scribbles on the returned work.

Although Trainee 3 notes seeking guidance from another trainee in the narration above, she is selective about whom she approaches for guidance;

Trainee 3 – ‘I mean I can ask people but I probably wouldn’t cause they don’t know anything about what I am doing’ (CLP20)

This perception of ‘who knows what’ can be seen to directly influence Trainee 3’s choice of resource for advice and guidance.

1.5.2 Trainee 1 and Approach to Task

In relation to tasks involving interviewing clients Trainee 1 indicates consulting with her supervisor;

Trainee 1 – ‘Generally I am with [supervisor] who is my supervisor and we discuss it through.’ [and] ‘A lot of the time we have come to the conclusion that really this is a no-go area but the client has said that they want us to continue anyway because there’s a principle at stake or whatever.’ (CLP37)

Trainee 1 is guided in the process through discussion with her supervisor. This discussion is indicative of Trainee 1 and her supervisor working together as a team to meet the needs of the task. The situation of Trainee 1, sitting with her supervisor, would appear therefore to be beneficial for her knowledge development as through working as a team she is being enabled to learn directly from her more experienced supervisor. However, despite feeling that it is ‘quite nice’ (CLP17) receiving constant supervision through sitting with her supervisor, it is interesting to note that Trainee 1 did not initially feel like this;

Trainee 1 – ‘Admittedly when I first moved seats I knew I would be sharing a room with her [partner], and there is only me and her in the room, and I thought that could be really difficult. Not because of [the partner] at all but because, you feel like when you’re on the telephone and somebody’s listening to you. And I found it very, very hard the first couple of months, it took me a long time to settle.’ (CLP18)

Situation, it would appear, can also cause feelings of uncertainty on the part of the trainee, uncertainty in relation to feelings of self-consciousness and how the partner might perceive Trainee 1’s approach whilst on the phone. Although Trainee 1’s feelings can be explained by her newness to the seat and the work of that seat, it is suggested that ‘time’, also plays a part, time to become comfortable in that

situation, sitting with a supervisor, and as such the time it takes to 'settle' is likely to influence not only how the trainee initially approaches a task, in the presence of others, but her knowledge development, the focus of the trainee perhaps being more on the self than on the task. However, these feelings of uncertainty change to that of confidence on finding the situation to be very helpful;

Trainee 1 – 'But then it is actually incredibly useful because you can discuss things as you are doing them' (CLP19)

As would be expected Trainee 1 continues to refer to her supervisor;

Trainee 1 – 'I know that anytime of day, provided she is not very busy, I can ask if she has five minutes, which is great.' (CLP86)

Trainee 1's use of her supervisor is indicative of her information behaviour and knowledge development; to seek guidance from her supervisor and learn from that guidance. However, whereas the shaping factor 'accessibility', of her supervisor, acts as a potential motivator in that Trainee 1 feels that she can approach her supervisor for guidance, busyness is potentially a barrier that could cause Trainee 1 to need to re-consider her approach, to re-consider her information seeking behaviour.

In addition to her supervisor Trainee 1 also indicates being guided by others in the department and the seeking out of guidance;

Trainee 1 – 'a lot of the time you get given something and somebody in the department will say they had a case similar to that so start here. In fact 99% of the time you can always find somebody to say your starting point is and go from there.' (CLP39)

Guidance from others was found to not always be fruitful;

Trainee 1 – 'I had already asked the person who had given it to me and he had asked a couple of people anyway and he said I don't know where you start.' (CLP40)

However, Trainee 1 does not assume that this will mean that no-one could help guide her as she continues her search;

Trainee 1 – 'I did ask a couple of other people in the department if there was anybody who had anything like this. And the only other person we asked was somebody downstairs in Property who deals with farmland and agricultural land thinking he might have had this problem with animals. Although he had never had the problem he actually had quite useful books that could point me in the right direction.' (CLP41)

Trainee 1's decision to continue to ask around is as a result of her belief that there will be someone out there who can direct her where to start, that this is the best approach to take and that it would ultimately save her time;

Trainee 1 – 'So you get wise to the fact that if you ask around somebody somewhere will know. I think when you first start you think you can't ask, it'll make me look really like I don't know what I am doing, but you really do wise up to that because otherwise you could spend days and you just haven't got the time.' (CLP42)

Although from the above quotes, it would appear that Trainee 1 asks around in general, not necessarily identifying a particular person because of their knowledge, Trainee 1 does suggest a link between her prior seat and her current seat in knowing who does what;

Researcher – 'The other thing you mentioned about the horse one is that you knew somebody in Property who might know something about it. Is that because you have worked in Property?'

Trainee 1 – 'Well, yes. I have worked in property so knew the department and knew what they did.' (CLP87)

Where she does not know, Trainee 1 highlights the use of talks in informing her as to what each department does and who is in it;

Trainee 1 – ‘If I hadn’t we get trainee talks, it’s a whole programme throughout the year. They bring in a person from each department to give a talk on what the department does and who is in it. [and] So you have got that and you are told what that department covers. You can’t work in litigation and not be involved in property or private client at some point because cases just overlap. So you do know vaguely who is around and what they do.’ (CLP88)

Trainee 1 suggests that the three seats, litigation, property and private client can be linked by the work they carry out, with cases potentially overlapping the three seat areas. Trainee 1 has already worked in Property which also helps explain her knowledge of the people resources available there, but she has not worked in the private client department and as such it would appear that the talks given on each of the departments have indeed helped increase her awareness of what they do there, thereby adding to her knowledge of people resources.

Trainee 1 also makes use of the librarian as a resource;

Trainee 1 – ‘We have a very good librarian who is wonderful. You can ring her up and say “could you find me anything you’ve got” because we haven’t got the subscription on all of the sites where as she has, so she will look for it for you.’ (CLP81)

However, access to the librarian is not always perceived as a solution;

Trainee 1 – ‘But there is also the fact that we have only got one librarian with an assistant for the whole firm. She’s overloaded and if you can do it yourself then do it because she is just so busy and it is not very fair to. Although she always helps when she can, I think it’s not always fair to ring up; she has just got so much to do. I think because we have got the facilities that we have we can usually go and find out ourselves unless it is something completely random.’ (CLP82)

Trainee 1 has access to the librarian as a resource but perceives that the librarian is very busy. This combined with the fact that Trainee 1 has access to the facilities, the databases herself, she suggests that it is more acceptable behaviour to carry out the research herself. This is an interesting point as essentially librarians are there to help solicitors with their research, but it could suggest that there is an expectation within the firm for the trainees to carry out their own research, to learn by doing their own research, referring to the librarian only when faced with an unusual need.

Trainee 1, however, also suggests that it can be difficult to explain what she needs;

Trainee 1 – ‘If it some very vague area, it is very difficult to ask somebody that is not a lawyer to do it because you’re looking for something quite specific or there is something in your head that you know will really click when you see it and somebody else won’t.’ (CLP83)

Trainee 1 perceives it to be easier to undertake her own research as she sometimes finds it hard to explain to someone else what she requires, she is not fully able to express what she requires. This suggests that there is a need for the person with the information need to browse, as only they will know what they want when they see it. Trainee 1 in her information seeking is bringing to bear her tacit experience; she will know what she wants when she sees it.

In approaching tasks Trainee 1 also makes reference to the ‘bible’ of litigation work;

Trainee 1 – ‘The Bible of litigation is the White Book, which contains every rule there is under the sun. So if ever you are stuck you grab the White Book and it tells you everything you need to know’ (CLP73)

However, on joining litigation Trainee 1 had to be directed to this key resource;

Trainee 1 – ‘I would forget it was there and would be asking silly questions and the answer was “go and look in the White Book”’. (CLP74)

It would appear unusual for a trainee not to be aware of such a key resource and Trainee 1 suggests that this is as a result of a lack of use whilst at University;

Trainee 1 – ‘At University you don’t really use it ever and you just forget and I had completely forgotten about this until somebody said go and use the White Book. [and] ‘So you think “oh how silly am I” and feel like a bit of an idiot. But once you get into the knack of always referring to the White Book, it’s just habit and because you don’t do it in any other area, you’ve constantly got to think “right, I’m doing this, check it in the White Book.” Once you have got that in your head then you’re fine. It’s when you forget that it’s there, which I did in miraculous style, but you learn.’ (CLP75)

A shaping factor is a referential memory of the need to use the resource for work within litigation; that work within litigation requires reference to the White Book to become second nature.

In reference to the White Book, Trainee 1 indicates a preference for the printed format;

Trainee 1 – ‘But you can actually get it electronically as well, but it’s more difficult on the internet, because you’ve for the rule, the summary of that rule then practice directions for that rule saying in practice this is what you do. But in the book it’s dead easy, you can flip to the practice direction but on the internet it’s a nightmare because it doesn’t all flow and you’ve got to know what you are looking for, you can’t just think I’ve got this broad area, where do I go but you can with a book. We all tend to use the book, it’s the most heavily used book in this firm I think, it’s fantastic.’ (CLP76)

Trainee 1’s need to browse a resource, rather than approach the resource with a known need, has impacted on her choice of format of resource. For Trainee 1 it is easier to browse through pages in a book than browse through pages on the Internet.

Although Trainee 1 prefers the print version of the White Book, as with Trainee 3, Trainee 1 is familiar with the specialist legal databases available to her;

Trainee 1 – ‘I did know there was an Animals Act, the only problem is that it deals predominantly with dogs and cats and things. Then it is the case of trying to find case law or articles on that area. The advantage is that we’ve access to wonderful legal subscriptions on the internet, things like Lawtel and Lexis Nexis and things. They are fantastic because you can put in a selection of words like “horses, trespass on land” or something, ask it to find any articles, cases or statutes in the last ten years that have this in it and then it just brings them all up and you’ve got to trawl through them and say is this relevant, which takes a lot of time but is a lot less time consuming than if you really had to start trawling through the library for anything.’ (CLP77)

Trainee 1 is bringing to bear her own knowledge of the Act to guide her, coupled with the explicit knowledge contained within published resources, to the task. Here Trainee 1 must be using her knowledge acquired as a result of prior experience as she indicates recognising what has to be done having identified the Act; the need to identify case law or articles. Trainee 1 is clearly impressed by the subscription services and this is likely to have been as a result of her prior experience in using them and despite the suggestion that it can be time-consuming to browse through the returned items, their use is perceived as being much quicker than starting to trawl through the library. Shaping factors are; ability to retrieve a range of items at once; perception of the resource and time saved.

As with Trainee 3, Trainee 1’s prior experience of these resources is a result of her time in the firm and from her time at University;

Trainee 1 – ‘we used them all at Uni. We used Lexis Nexis. I actually prefer Butterworths, which I am sure we used at university; we’ve just got it here. It’s just come in this week on a free trial. That’s much more comprehensive, it’s got everything.’ (CLP78)

Despite Trainee 1’s clear approval of the electronic resources, she does demonstrate an informed awareness of their capabilities;

Trainee 1 – ‘I use about three and pull them together, but they only go back about 15 years. If you know you need something before that then you ask Wendy because we haven’t got access. And it will miss things and I don’t rely on it solely at all but it is a great starting point. With cases and things it

will give you the brief summary of the case, which if you go to the library and grab the case in full then you have to scan it very quickly to find out if it is actually relevant. It's a lot easier if somebody else has summarised it so you can find the relevant points and then go "I need that case" and go and get a full copy. No, I don't rely on it completely at all, purely because I know they are not complete.' (CLP79)

Trainee 1 has clearly learned from her experience of using electronic resources. She demonstrates an awareness that the databases are not comprehensive in themselves, as indicated by her suggested pulling together of information obtained from the use of three databases. There is also a suggestion that databases will potentially miss things and as such cannot be relied upon as they are incomplete. Despite these potential drawbacks Trainee 1 acknowledges the value of these resources; their use of summaries to more easily and quickly aid in the identification of relevant material. From this it can be posited that Trainee 1 is implicitly evaluating resources as regards coverage, content and trustworthiness.

1.5.3 Trainee 2 and Approach to Task

Trainee 2 is working on a boundary dispute;

Trainee 2 – 'There was about 30 lever arch files or so, gasp! And he [partner] basically said you have to sit down and read them all, that'll take you a couple of days. So I sat down and I read most of it but you get interrupted and all the rest of it so it is difficult to actually completely read the, a lot of it is just, although you are reading it it's like in any situation, you get lots of documents to read and you end up getting bogged down in all the detail and you think well actually its better to keep to the core and then, I tend to find you pick up things as you go along as well but it took me a while to get to grips with the case and even then until you actually start doing practical things on it you learn so much more than just reading it, just reading it I don't know the statistics but I am sure you only absorb a certain amount of what you read anyway. Yes at the start I would be going back to him all the time asking him things but even now I'm not really allowed to send things out without him checking it first cause that's just the role of trainees you have to get things, you know, checked.' (CLP43)

Trainee 2 is initially guided by the partner as to where to start familiarising herself with the case. Despite this guidance, Trainee 2 experiences some difficulty as a result of interruptions and of information overload as a result of the amount and detail of the information. Trainee 2 also suggests that reading about the case is not sufficient for familiarisation with the case suggesting uncertainty; that it is only by undertaking practical tasks on the case that one becomes familiar suggesting increased confidence. Trainee 2 was found, when uncertain, to seek advice from the partner, particularly at the beginning of the seat. As she progresses through the seat, she implies that she does not necessarily need to seek advice suggesting increased experience and confidence as to what is required of the work, but returns to the partner as a result of the nature of the work, where all work carried out by trainees has to be checked.

Trainee 2, as with Trainee 1, refers to the key resource covering civil procedures, the White book;

Trainee 2 – 'Basically in litigation it is all governed by the civil procedure rules which they were recently reformed, 98 I think by Woolf, who reformed them all so and they are all contained within the White Book which I can refer to but on the whole, on the LPC legal Practice course that I did two, one and a half years ago – you basically ran through the basic format of litigation and what comes after disclosure, documents, witness statements and very much sort of the next step' (CLP89)

Trainee 2 suggests that her knowledge of the procedures is as a result of her time on the Legal Practice Course. This would suggest that Trainee 2 potentially uses a mixture of knowledge acquired from her experiences on the Legal Practice course and brought to bear to the matter in hand, and explicit knowledge as contained in the White Book when working on litigation tasks. As such Trainee 2 is using her tacit knowledge at the same time as seeking or gathering explicit knowledge. However, although it would appear that the Legal Practice course has indeed provided Trainee 2 with knowledge of the basic procedures, in practice it is different and there is now a need to refer to the White Book in much more detail than was found at University;

Trainee 2 – 'Cause you really have to understand the steps involved before you can start thinking about the tactics and negotiations that sort of thing but you also get introduced to that on the LPC ehm

so it is just a question of, you know the basics when you start as a trainee, but then a) you are putting it into practice which is completely different (smiles) and b) actually having to go back to the white book and refer to it in much more detail' (CLP90)

Despite Trainee 2's prior experience from the Legal Practice course combined with the procedures as outlined in the White Book this was not always sufficient to enable Trainee 2 to perform the task;

Trainee 2 – 'well it lays out a lot but it will say things like ehm, if you file this form at court and so I would just think right well I'll send it to high court, I'll send it to the chief clerk, and even that I've only picked up cause I've been in litigation for a while but that's the name of the person I should probably send it to. But so I would write a letter and take it to my supervisor and said I think this is who we have to send it to, this is all the stuff. He said well maybe you should just phone up the court and just say look it's an appeal and just check that, that is the correct person to send it to. So I phoned up the Court and they said oh no we actually have an appeals clerk so send it to them.' (CLP45)

In addition to using her prior experience and the White Book, Trainee 2 is also using what she has learned whilst in litigation. However, what she has learned whilst in litigation changes on consulting her supervisor and results in Trainee 2 amending her approach to the task. The feedback from her supervisor also resulted in Trainee 2 reflecting upon her initial approach;

Trainee 2 – 'possibly if I had just used common sense I should have thought well maybe I should just phone up the court and check, cause it had to be dealt with quite quickly but a lot of the time you are so desperate to get it out and actually finish the task you been given that you don't necessarily stop and think oh well I need to phone the court just to check that that is the case and so forth' (CLP46)

Trainee 2's reflection suggests time and urgency as shaping factors on her initial approach. However, it is likely that she will review this approach in the future as a result of the feedback from her supervisor, and her now increased awareness of how she could/should have approached the task.

Trainee 2 also mentions the carrying out of research into a property matter for the Family department;

Researcher – 'So how would you approach it?'

Trainee 2 – 'Because in the library there are sections that's mainly used by the litigation department and section mainly used by property, so I went to the property section of the library and there are sort of bibles as they are called in certain fields so I got to the property registry one and I've currently got it on my desk. So I would start there and then possibly look at the website the land registry web site cause a lot of the time they've got, as do the court, they have sort of aimed at the layperson, help and guidance leaflets and things like that and that's actually quite useful to get the basics and then from there you might think oh alright so they are advising me to do this I'll see what it says in this book or see if there are any cases and hopefully try and pin something down.' (CLP91)

Trainee 2's first port of call, in this instance, is the library. She demonstrates awareness of how the library as a resource is organised and of the resources themselves, and approaches her research with a known-item need, one of the property bibles. Shaping factors in selecting resources for use are; perception of resource (bibles); resource content (e.g., guidance leaflets); and level of information (aimed at the layperson). It can be posited that Trainee 2 is not only aware of key resources but that she is implicitly evaluating the resources available as to their suitability in meeting her needs. In addition she is learning from these resources, identifying the basics and then using what she has learned to identify further materials of relevance such as cases.

Researcher – 'So how did you know about these resources?'

Trainee 2 – 'I knew about the property one cause when I was in property I was told about it, much like in litigation, it's the same, a few of the big ones such as Encyclopaedia of Forms and Precedents, Atkins Court Forms, they're in the library. In law school especially we had to do a two seminar course on research and where would you find this, this would be the best place to find it and you know they did do that, cause obviously they are aware that trainees get a lot of research to do. (laughs).' (CLP92)

Trainee 2 was guided to resources whilst in the firm and was also made aware of resources whilst at University as a result of research seminars. The approach taken in the research seminars was also found to help Trainee 2 remember how to use the resources;

Researcher – ‘Do you find you remember a lot of it?’

Trainee 2 – ‘Yeah it was probably quite good the way they taught it cause at the time you thought this would be quite useful if I had to find it on my own but they did actually make you like go and find an example of this, and you were allowed to work in groups, so it did actually force you to go and open the books rather than just say oh I know it is in there somewhere cause actually when you come to open the books and you realise oh it has got a very strange index or a very strange numbering system it is actually quite handy to have already looked at it before. But a lot of the time the more specialist bibles as such, might point you in direction of oh there is a book called such and such go and look at that, specifically on that area.’ (CLP93)

Rather than simply being informed that a resource exists that contains specific types of information, Trainee 2 acknowledges that by being forced to go and open up the resources, she is better enabled to learn by doing practical exercises, resulting in her remembering better how to use the resources. In addition she has come to know that the so called ‘bibles’ might not offer the information themselves but act as teaching guides by indicating further resources.

In relation to knowing about the Land Registry web site Trainee 2 again refers back to her time in the firm and at University;

Researcher – ‘The Land Registry website, how did you know about that?’

Trainee 2 – ‘I think I knew about that from property. Mainly, I think it is just force of habit from University and just in general now cause everything is on the Internet you cause just sort of think oh right and put in a search. Obviously I knew about the land registry as soon as I went into property cause there was quite a lot of land registry, oh they’ve got a web site and from then so you just search it as you go along, Oh what does it say now and you get to know what is on there and what’s available out there; much like the court one.’ (CLP94)

Trainee 2 is not able to clearly decide how she first came to know about the Land Registry but it would appear that both experiences, the firm and University, have contributed to her knowledge. Trainee 2 is bringing to bear her past experiences of resources from University to her current situation, with the two experiences blending into one. Interestingly she appears to believe or at least has gotten into the habit of believing that everything is now available on the Internet and as a result of that belief includes searching the Internet as part of her search strategy.

When asked if Trainee 2’s typical approach would be to try a web search;

Researcher – ‘Would you say then that would be a typical approach to your searching for something that you haven’t come across before, would you do a web search first or?’

Trainee 2 – ‘Probably not, I would probably go to a specific legal, I would probably go to Halsbury’s laws because I find that searching the web you just get so much, a lot of it is completely irrelevant, it could be somebody’s last name or something, you just get loads so I find that I usually go to the legal databases first and then from there possibly to narrow it down maybe put in quite a narrow search. But I don’t tend to, cause you can’t be certain of the genuineness of it, you are not quite sure of the source or whatever so I think it is safer to go for ones that have been published by set people. There’s just so much rubbish on the Internet really.’ (CLP95)

Despite suggesting above that everything is on the Internet Trainee 2 suggests that she would select a specific resource. This resource is available via the Internet and as such it suggests that in her previous example what she is really suggesting is that all the specialist database resources are accessible over the Internet and not that the information can be generally found by utilising, for example, a search engine. Trainee 2 is also implicitly evaluating resources before deciding to use them or not; recognising the disadvantages of searching the Internet perceiving the information found over the Internet to be unreliable.

Like Trainee 3, Trainee 2 links her knowing how to use the resources to her time at University and to trial and error;

Researcher – ‘So you haven’t actually had any training in searching or?’

Trainee 2 – ‘I can’t, definitely not the firm, I think that they assume having gone to University having gone to law school that you know it. I think at law school in the session that I was telling you about where we had to go and find court forms and things like that. I think possibly we were given the hint that you should really narrow down your searches i.e., look at what happens when you type in this, you get loads of results, look at what happens when you type in that. But I think it is also just familiarity with the software, within Halsbury’s it took me ages to figure out that if you put, cause in most searches engines e.g., Google if you want to search I don’t know, company and contracts in most search engines you would put companies, contracts but in Halsbury’s, or what I have picked up anyway, you it seems to be that you don’t really need to bother with the comma as long as you, it took me ages cause it kept coming back with very little responses and I was thinking cause I had the comma and they were actually finding that exact phrase but that’s just trial and error and possibly someone but I don’t think anyone told me that but. (CLP96)

Unlike Trainee 3, Trainee 2 does not link her knowledge of how to search the resources to her time in the firm but suggests that the firm will assume that trainees will have learned search techniques at University. Despite a memory of being told about some search techniques whilst at University, Trainee 2 does not appear to remember explicitly what these were in relation to specific databases. This is further evidenced by her suggested attempt at transferring Google techniques to subscription databases such as Halsbury’s, perhaps suggesting that she is not aware of the differences between the two tools, Google being a search engine and Halsbury’s an information retrieval system with differing structures and search tools. This lack of knowledge and therefore a need to learn through trial and error does appear to influence her success in finding relevant information.

Trainee 2, like Trainee 1, also used the librarian as a resource;

Researcher – ‘So you do your own searching?’

Trainee 2 – ‘Yes I tend to. Occasionally if I am having difficulty finding something or it is taking me too long then I’ll ask the librarian to do it but when I first, not climbing up the chain, but when I first started I wasn’t, I was never that busy that I didn’t have time to do it myself and I think my supervisors expected me to, whereas in property and especially in commercial litigation, you are more busy. I think they don’t know and mind if you are doing it yourself as long as you get the answer. If you have to give it to somebody else to look for it then that is fine and that is what I tend to do just because it tends to be a waste of time unless it is easily accessible and I go oh yeah I know where that is. Obviously the librarian is very good but I know that she is very busy and if I need it done then and there then it is just easier and quicker. And I do know where to go it is easier to go and look it up myself.’ (CLP97)

A with Trainee 1, Trainee 2 also perceives the librarian to be very busy and as a result of this perception suggests that it is quicker to undertake the research herself. Additional shaping factors are; ‘time available’, where Trainee 2 now finds herself too busy to carry out her own research preferring to pass it to others; ‘acceptable behaviour’, where she perceives that when she initially started in the seat she wasn’t as busy and therefore expected to undertake her own research, whereas now, in her current situation, being busier, she perceives her supervisors don’t mind who carries out the research as long as the answer is found; ‘time’, in that she perceives it potentially to be a waste of her time to carry out her own research; ‘accessibility’, ‘easiness’ and ‘speed’, where if the resource is readily accessible to her she will carry out her own research just because it is easier and quicker if she needs the information there and then; ‘knowledge’, undertaking the research herself when she knows where to go for the information.

Interestingly, on further reflecting upon her use or not of the librarian Trainee 2 contradicts her previous suggested behaviour;

Researcher – ‘What would make you decide which way to go?’

Trainee 2 – ‘Possibly depending on how urgent, on how stressed it was that is was urgent when I was given it in which case I would probably just do it myself to make sure that it was done there and then and that it was definitely the right thing that was found. A lot of the time, I won’t give the entire task to the librarian, I’ll maybe say I’ve been asked to find out things on adverse possession and I would say can you possibly find me any cases on adverse possession and that involved the word interruption and then it is quite narrow and I know that if she just types in adverse possession she’ll get loads of cases and she doesn’t know what I need and she will just forward them to me in which case it will take me longer reading through all the ones she’s actually forwarded to me, so I try to maybe make it more, to narrow it down before I say can you find this for me or find that for me or actually find the name of the case and say can you go to whatever searches and find a copy of it?’ (CLP98)

Whereas initially Trainee 2 suggests that she would pass on most of the research to the librarian unless she knew where to find the solution, Trainee 2 is suggesting that she would carry out the research herself to ensure that the correct information was found. This could suggest a lack of trustworthiness in the librarian as a resource but it is more likely that Trainee 2, in an effort to ensure that the correct information is found, and found quickly, feels the need to trust in her own judgement, to take responsibility for finding the correct information. Trainee 2 also suggests that she would not normally give the whole task to the librarian, but aspects of the task, complete with guidance as to the search terms to use. In doing this Trainee 2 is demonstrating knowledge of search techniques and the need to narrow the search in order to obtain fewer, more manageable records to read through.

Trust, however, does come into the equation;

Researcher – ‘Would you say Trainee 2, you obviously do a lot of research yourself and you at some point make decisions as to when to pass it on, do you think that when you qualify will you continue to, do you think, doing all your own research?’

Trainee 2 – ‘I guess it is not really efficient for me to do it, depending on how quick I had to find it and how much I trusted the person I was asking to do it, to do it properly or to find the bit I was looking for. I mean, the higher up you go, up the chain, it just makes economic sense to delegate it otherwise it’s just not cost effective to do it yourself. But, ehm, when I am still quite newly qualified I imagine I will still be expected to do my own apart from I could ask librarian to do some things for me.’ (CLP99)

Trainee 2 suggests that as she becomes more experienced the carrying out of her own research will be weighted against trust in others, cost effectiveness and efficiency. However, it will also depend on the resources available to Trainee 2 once she is qualified, as a newly qualified she will not necessarily have a trainee that she can ask to do research and it could simply be a choice between herself and asking the library;

Researcher – ‘So that would be the choice, either do it yourself or ask the library to do it?’

Trainee 2 – ‘Yeah’

Researcher – ‘You wouldn’t have a trainee then?’

Trainee 2 – ‘No.’

(CLP100)

Trainee 2 was also found to use other solicitors;

Trainee 2 – ‘So when I started doing that cause there were so many documents, I would go to a sort of more junior [solicitor] to ask, is this the right way of carrying it out, is this the most efficient way of carrying it out? Cause I’d done smaller lists before on smaller files, this one was quite big so I just wanted to make sure that I was being in the most efficient way and I think it’s really just a question of practice, you know, with big cases. So I tend to go for further information.’ (CLP101)

Trainee 2 indicates a preference for approaching others to check what she is doing is correct. This is an understandable approach as the type of task she is undertaking relates to disclosure and privilege, which she highlights as difficult;

Trainee 2 – ‘in this case cause the dispute had being going on for quite a few years there was loads of stuff and although at law school you are taught this thing called privilege that, it lists the documents that you don’t have to disclose them, but the rules are quite difficult to understand and it is not always

actually straightforward and I find that although its really common tasks that trainees get to do but it's actually quite difficult to do unless you know the file because it is difficult to know is this relevant, is this going to be privileged?' (CLP102)

And as such, although there will be procedures, each case will differ and as a result it will only be through experience that the trainee becomes more knowledgeable about what to include, exclude. Trainee 2 is utilising the knowledge and experience of another member of staff to help further her own understanding of what should be included, excluded.

When considering the terminology used in relation to the boundary dispute Trainee 2 links her knowledge to her prior experience in Property;

Trainee 2 – 'the seat that I had done prior to the commercial litigation seat was the property seat, so in terms of understanding the property documents in a file, that was terminology that I had a lots of experience about, so I knew what to look for in the title deeds and yeah you know what you are looking for so I suppose in that sense if I hadn't done property I probably would have been a bit struggling with that kind of thing.' (CLP105)

As would be expected Trainee 2 also used her supervisor;

Trainee 2 – 'I would tend to ask the partner that I sat with cause I get on quite well with him and he is quite chatty and we chat quite a lot' (CLP103)

Shaping factors identified in enabling Trainee 2 to feel able to approach her supervisor are; relationship and personality.

Further shaping factors identified by Trainee 2 in relation to her use of her supervisor were; time saving and easiness; accessibility, sitting in the same room; and situation, if the task is for the supervisor with whom she sits;

Trainee 2 – 'a lot of the times it is easier just to go back rather than spending half an hour searching through all the files and the letters and correspondence and things trying to get to the bottom of it, it would actually be quicker especially if it is in the sense of for the partner I am working for is in the room, and it is one of his files, it is easier to say hang on a second why did he do this? You know – that is a lot quicker.' (CLP104)

1.5.4 Trainee 4 and Approach to Task

Trainee 4 indicates the different approaches of the solicitors in the communication of tasks and his preference for face-to-face communication;

Trainee 4 – 'so if it was work from my partner[supervisor] he would probably just do a memo to me and the couple of research things that I vaguely remember doing for him, a memo would just appear on my desk and I would do it and if I needed to I would ask him something more specific. [and] So that was set out very basically, so this is what I want to know, either go and look up a book, look on the Internet or phone them up somewhere in France. So I looked on the Internet and it didn't really tell me so I had to phone them up and attempt to speak in French to them. So with my partner it was very much a case, he would set it out in a memo, more distant to him'

Trainee 4 – 'whereas the other partner with whom I work with mainly would be more, if she has something that is quite urgent she would come in my room and say can we have a quick chat, go and chat to her, it wouldn't be a memo cause I was making notes and that was better in a way cause I could ask her questions as we went through and say is it more specifically to do with this, this, this? Where do you think I should look? And I could get more ideas from her, so that was a better format more me definitely. [and] She told me to look up the Statute books or the precedent books' (CLP47)

Whereas his supervisor guides Trainee 4 in the form of a memo, the other partner for whom he does work invites Trainee 4 into her office for a chat about the task. Trainee 4 perceives his supervisor to prefer communication by memo as it enables him to maintain his distance although he does suggest that

where uncertain he could go back to this partner and ask for clarification. Perhaps indicative of Trainee 4's personality, he prefers the approach taken by the partner who opts to call him in for a chat. Although he clearly seems to prefer this approach, to chat about the case, it is interesting to see that as Trainee 4 reflects on the task undertaken, the opportunity to ask questions, to clarify the task requirements, was not initially taken;

Trainee 4 – 'I didn't grasp the actual thing what she was asking me to do in that case so she was saying you should have asked questions way back at the beginning when I was giving you instructions instead of just taking them down' (CLP48)

This can suggest that Trainee 4, *at that time*, did not feel confident about asking questions, perhaps because he was still fairly new to the seat, feeling it safer to listen and take notes, despite not understanding what the solicitor was asking. On reflection and on the feedback of his supervisor he recognises the need to ask questions right at the beginning. Trainee 4 has learned by experience, but this experience, although having taught him that he should ask questions at the beginning, has also adversely influenced his perception of the appropriateness of going back to partners for further guidance as evidenced by his reflection below. As a result of the feedback from the partner, Trainee 4 now suggests that it is not always an option to go back and ask for help;

Trainee 4 – 'if there is a chance go back and speak to the person, but that is not normally, or sometimes it is not normally an option' (CLP23)

Trainee 4 – 'cause I have done that once before and she said, and she has pointed me in the right direction further but afterwards, after we had done the whole exercise she said to me that you shouldn't have come back to me then, you should be doing that yourself. I don't want to deal with, you should have come back with an answer cause you are a trainee, you should know that.' (CLP24)

Despite understanding why the partner had said this (CLP48) above and in addition to perceiving the partner to be nice and helpful:

Trainee 4 – 'so we went through it together and she was very nice about it' [and] 'She was being very helpful saying if in doubt at the beginning ask questions then so that you are not wasting your time or my time' (CLP26)

Trainee 4 now prefers to go to the other trainees in the first instance:

Trainee 4 – 'quite often if it has been an hour on a piece of work and I've got nowhere and I think to myself oh I don't want to go back to the partner and say I've not done anything but I've spent this amount of time on it and I would quite often go to her [2nd year trainee] and say what do you think I should do – what have you done in this situation and she has said don't be stupid – go and speak to them' (CLP27)

It is evident from Trainee 4's experience that feedback, although considered valuable and a learning opportunity, can also adversely shape the future behaviour of the individual. In addition, despite Trainee 4 perceiving the partner in question to be nice and helpful, still feels reluctant as a result of his experience of the feedback to go back and ask in future situations, relying more on the trainees for advice as to what he should do.

Both partners initially provide guidance as to the types of resources that Trainee 4 could use, for example, books, statutes, Internet, although no specific titles of works are mentioned, and as such there is a reliance on the Trainee to know about or be able to find out about specific titles. Interestingly, from the choice of, 'go look up a book or the internet or phone them up in France', Trainee 4 opts for the Internet first and then the phone. The Internet does not tell him what he needs to know, but his narration does not indicate what he accessed or how. However, his choice of the Internet and then the phone could suggest that he is not aware of any specific titles that might meet his needs in this instance, and the need to approach the primary source in France directly, despite not being too confident about his French. It does not answer, however, why he does not try to find out if there are any specific titles that could meet his needs, for example through the library.

Despite Trainee 4 suggesting in the example above that his first port of call was the Internet, he did not initially know on joining the seat that he had access to the Internet from his desktop;

Trainee 4 – 'I've not really used the Internet until about the last two months of litigation when I realised I did have it on my computer' (CLP108) [and]

Trainee 4 – 'It was there all the time the Internet link and somebody had said to me oh you have to get a password to get on the Internet, or you have to get the Internet installed. I didn't need it to begin with and I thought that if I got it put on and I was bored I would go on and play and I didn't want to do that, that will waste my time and that is not why we are here. So I deliberately didn't ask for it. Then I did have to do some research, somebody said 'oh you just go in there and you are on the Internet'. I went oh are you, I hadn't realised at all, so I hadn't been told at all what was on the computer.' (CLP109)

Misinformation led Trainee 4 to believe that he had no access to the Internet as it required a password or to be installed. Trainee 4 remains unaware until motivated by an information need, which results in his discovery of desktop access to the resource. Prior to a specific need for information Trainee 4 considers that to have access would be a potential distraction in that he might be tempted to go on and play. This is potentially indicative of his perception of the Internet, as a resource to play with rather than as an information resource.

As Trainee 4 has not really used the Internet in Litigation he was asked if he had had any training in searching the Internet;

Researcher – 'Have you had any training in searching?'

Trainee 4 – 'I've not had any training, which would be helpful cause each different site you go into, if they have a search engine there might be different rules that apply to that search engine so I'm typing in key words slash key word slash keyword but today I was in the government site, and I clicked on help for search, don't know why I did it, but it gave you an example of how to do it. I didn't realise that you could type in the whole title and it said don't do keywords cause the more information you give the more refined your search will be, you can like put a minus (I was doing protection/names/Internet and it was bringing up site that had Internet in it which is obviously millions and it said if you bring up a minus Internet at the end it won't bring up very site with Internet on it.' (CLP110)

Although Trainee 4's narration is a bit confusing, this just adds to the conjecture that as he has had no training he will not be very familiar with search techniques. It does, however, provide us with an insight into his approach, where for example he tries the help section on a government site, but can't really say why he clicked on that area, but having done so finds it very helpful. His example search is also illustrative of how difficult it can be to know how to enter search terms. It is only by trial and error that Trainee 4 is picking up some hints on searching;

Researcher – 'So it's like by accident you are beginning to learn about search mechanisms that are available on the Internet?'

Trainee 4 – 'Yes, which does speed up time so much quicker. I could have probably gone to Starsky in the library and she probably could have told me at the beginning but, or maybe not I don't know.' (CLP111)

Perception of resource and effort can be seen to be influencing Trainee 4. On reflection Trainee 4 perceives that Starsky may or may not know about search mechanisms and it would have required effort on his part to find out. Trainee 4's narration also suggests that he is perhaps not fully aware of what the librarian can do for him.

Trainee 4 does use the library, however, but suggests this is his port of call when he is not provided any guidance as to which resources to use;

Researcher – 'So what would you do in that case Douglas if you had to start from scratch?'

Trainee 4 – 'First port of call would normally be the library, look through a couple of just general books to do with the area of the law. I wouldn't spend too long on that cause you could spend a long

time and its not going to get you anywhere, so normally if I don't think that it is getting anywhere I will, if there is a chance, go back and speak to the person' (CLP49)

The key shaping factors in meeting the needs of Trainee 4 in this instance are time and the perceived acceptability of spending time browsing resources to inform him of that area of the law. Trainee 4 is suggesting that the more time spent browsing is, in his view, potentially time wasted, feeling that as time goes on he is not going to get anywhere and as such prefers at this point to go back and ask. Use of these resources is therefore limited by Trainee 4's perception of the acceptability of spending any length of time on them.

Trainee 4 also indicates asking the other trainees, seeing this approach as very helpful;

Trainee 4 – 'I do use the other trainees as well. I use email and ask if anyone else has done this? Cause quite often – there are at least three trainees in each department, quite often they have done the same point of research and most of us keep a copy of our research on a file in the computer and people have asked me for things and I've said 'Oh yes I've done that' and printed it or just given them a copy, it is very helpful to use each other.' (CLP50) [and] 'I would do our year first, just because of the fact I don't know some of the 2nd years as well. There is only actually four in the 2nd year here so yeah I would email them if I knew that they had been in that specific seat before and done that work. I would use them.' (CLP112)

Trainee 4 is confident that the first year trainees will be able to help him, but uncertain about the second years. Shaping factors are; 'confidence', in the perception that someone will have carried out something similar in the past; 'relationship', through knowing the other trainees he feels more able to approach them; and 'prior experience', in that other have asked him for help and he has obliged suggesting to him that others would do the same. Trainee 4's suggested preference to seek help from the other trainees when combined with his expressed preference above for face-to-face communication with the solicitor so that he can ask questions when undertaking instruction is perhaps indicative of Trainee 4's preferred approach to tasks, to seek advice and guidance prior to attempting the task himself.

1.5.5 Trainee 5 and Approach to Task:

Trainee 5 is initially guided by her supervisor as to how to start approaching the task.

'So it started with him [supervisor] asking me I could ring and find out whether they were ready to exchange – that kind of thing and it just sort of went on from there. I had to also get in touch with our client to get information from them and it sort of became my file and I was dealing with it and only went back to him occasionally, if there were things that I needed to question him on.' [and] 'I kept the file and knew it had to exchange so what's the position on that – it sort of went on from there rather than it being a case of do this, do this.' (P40)

Once Trainee 5 is in charge of the file, she is guided by the file itself, by examining the file to see at what stage the file is at and then considering what needs to be done next. Here Trainee 5 must be using her knowledge acquired as a result of prior experience, as she indicates recognising what has as yet to be done plus she suggests that she is only seeking help from her supervisor occasionally. Trainee 5 can therefore be said to be bringing to bear her existing knowledge, experience and beliefs to the situation, what she is certain about, in order to establish uncertainty, what she does not know. This is further evidenced by Trainee 5's reflection on the task:

'It was a mixture of knowing things myself I suppose, trying to work things out and fumble my way through with the client, talk things out with the client, chat to him about it. Or go back and see the supervisor to find out what to do.' (P41)

Trainee 5 acknowledges that she is using a combination of her own knowledge in knowing what to do, and in trying to work out what to do in addition to seeking guidance from the client, through discussion of the matter.

Trainee 5 reflects on a task she was given to do on drafting contracts;

'Cause I spent about two days trying to do that. Precedent first of all and then you take instructions from the client – whether they have got any requirements that they want to go in and then [my supervisor] would say what he thought should go in it as well. You look at title deeds to see what's in them and you put some of the same things in the transfer of contract. And I looked at legal practice notes from the course that had clauses in them and encyclopaedias of forms and precedents and look at King's draft. And then try to put it all together, that's pretty much the sources for that.' (P69)

Trainee 5, in order to tackle the task, seeks information and guidance from a range of resources, using precedents and title deeds to inform and guide her as to what the contract should look like. She is then further guided by the client, her supervisor, her notes from the Legal Practice course and the key published resources.

Trainee 5 suggests that she came to know about the precedents from her supervisor;

Trainee 5 – 'The supervisor partner, he actually gave me a list of them, all the precedents, how you get to each one of them so that was quite helpful' (P67)

Researcher – 'Are these all computerised?'

Trainee 5 – 'Yes but there are also books of them in the library and there are specific books that have clauses and things like that in them.' (P68)

In addition to being guided by her supervisor Trainee 5 demonstrates an awareness of the key published sources of precedents and where they are held, however she is unsure as to whether she learned about them at University or from her time in the firm;

Researcher – 'The sources you used, again did you know them cause you had used them at University?'

Trainee 5 – 'Yes, or I had used them since I'd been training in the library, that's the precedent books they use.' (P71)

In addition to the library holdings of precedents, Trainee 5 talks about the firm's precedent system;

Trainee 5 – 'They store things in the precedent system anyway I'm not sure if it's so much things that aren't in the precedent books. There's not a particular database outside these books that has completely all drafted contracts that people have done before if they come across one, take a copy from the files or something like that but they are generally in the book anyway or if you can't find what you are looking for I know that the partners ask each other if they haven't come across something, have you heard of this before? What do we do for this if they can't find a precedent for it?' (P73)

Although Trainee 5 is not very certain as to whether the firm's precedent system holds precedents unique to the firm, she is at least aware that precedents can be found in the firm's system and in the library. She also suggests that the partners will check the system for an appropriate precedent and *'ask each other'* if they haven't been able to find something. This *'asking each other'* suggests that there is a culture within the property department for colleagues to use each other as sources of information, *'have you heard of this before?'*, and knowledge, *'what do we do for this if they can't find a precedent for it?'*

Knowing how to approach the task is however directly linked to her experiences on the Legal Practice Course;

Trainee 5 – 'I probably knew on that one what to do cause I have done some of that at college. I'd drafted contracts, drafted transfers so I knew how to do them.' (P70)

It is clear from this narration that Trainee 5 has brought some experience and knowledge of drafting from college to the firm. There is a direct transfer from her learning at college to the work she is doing in the firm. This is contradictory to earlier findings where in Trainee 5's interview (P14) the suggestion was that what she was learning at college or University was not perceived to be directly transferable to what happens in practice. When reflecting on what Trainee 5 already knew, or what she learned from being in the firm, the topic under discussion had been the sale of a property. Here Trainee 5 is reflecting on the *'drafting of contracts'*. Although clearly not unrelated, Trainee 5 is perhaps bringing

to bear different memories, experiential knowledge of what is required in the drafting of contracts when compared to considering the broader task of the 'sale of a property'. As a result of this differing experiential knowledge she is perhaps more able to contextualise what she knew and how she came to know it, making a direct link to what she learned at college or University.

1.5.6 Trainee 6 and Approach to Task:

Like Trainee 5, Trainee 6 was initially guided by her supervisor as to how to start approaching the task:

Trainee 6 – 'I think when I first started they suggested that I read a couple of government circulars and I think it was released by the Stationary Office but I think it was a renowned or an important book or manual sort of thing on compulsory purchase and they suggested that I read parts of that in order to get a hold of the idea.' (P42)

Researcher – 'So was that your supervising partner that suggested that or?'

Trainee 6 – 'It was my supervisor, he is not a partner, he is an associate but yes it was my supervisor who suggested that.' (P43)

Trainee 6's initial memory of, or knowledge of the resources used, demonstrates her unfamiliarity of the area of law and its resources. Due to her unfamiliarity with the area, Trainee 6 is unable to explicitly recall what the resources were but has a general idea of their importance. In addition to these resources she was directed to precedents:

Trainee 6 – 'we have like precedents to work from and so that wasn't too bad.' (P75)

Despite feeling unsure about what she was expected to do, by being guided to the precedents, Trainee 6 gains confidence. When asked if she knew there was a precedent bank in the firm:

Researcher – 'When you started – did you know that there was a precedent bank in the firm?'

Trainee 6 – 'Ehm I assumed there would be a precedent bank but I haven't actually used it because I think it is more a precedent bank for property whereas planning is quite specific, so, but I know my supervisor, I know the planning department has got, or actually it's my supervisor, has precedents and so I get precedents of his. And I'll save the precedents that I did for the compulsory purchase, are saved in his precedent bank for him.' (P76)

This assumption that there would be a precedent bank is not unusual as all law firms will use precedents in their work and the trainees will be aware of precedents from their studies. What is interesting here is that Trainee 6 does save the precedents she worked on for her supervisor but does not indicate saving them for future reference for herself. This can perhaps be explained by the ability to access her supervisor's precedents.

Having been guided to the appropriate resources to use Trainee 6 gives us some indication of her approach:

'I went to them, I did the reading and I looked at them and then obviously I had to adapt them and change them, change all the names and things and look at the information, there was quite a bit of drafting involved, you have got to draft a schedule so you needed like more information, so I think that some of the information was got, but like we had quite regular meetings to discuss how things were going and who was doing what.' (P44)

This would suggest that there were further guidelines in the material she read as to how to format the drafts. In addition she has the additional help of the group meetings. However, Trainee 6 did have some difficulty with the task and part of her solution to the problem was to approach one of the partners for advice:

I mean part of it I didn't know how to do – I mean there was like a table there to put information in and that was, I mean really I didn't know enough about the site and I didn't really know how to – how to phrase things almost or how official, you know what type of language you are supposed to use. So I think I went to see one of the partners who has done a few before about that. So we had a meeting and

we went through that. But not with – oh just maybe if you are doing that you have got to do it like that and then from that I could play around with what I wanted to do with the rest of the precedent.’ (P45)

Shaping factors influencing Trainee 6’s behaviour are; ‘language’, difficulty with language, not knowing how to phrase things; ‘unfamiliarity’, with the site; and ‘perception of who knows’, leading Trainee 6 to seek further information and knowledge on how to draft the document from a partner she perceives knows how to do them having prior experience of them.

When asked if this would be her usual approach:

Researcher – ‘Trainee 6 would that be you your normal way of doing things, for example, you decided with the precedent that there were certain bits that you could do, that was quite straight forward, then sections that were quite difficult, would you normally automatically go and seek the advice of a partner?’

Trainee 6 – ‘I’d normally, I mean, just in general terms, normally if I’m doing something I’ll have a go myself, I’ll do the research, I’ll have a go and I’ll put down what I think it is and then maybe when it came to actually having to finish it I’d go and see And say I’ve done this, I’ve done it like that because I think that but I’m not sure how that is supposed to be done, I looked in a book and they have done it like that but another book, they have done it like that, something like that, so to be fair I try to do things myself before going to other people often because, sometimes it would be easier to go to other people but I actually think you learn more if you do it yourself. And also people get bored (laughs) if you like pester them all the time (laughs).’ (P46)

Trainee 6’s approach ‘to have a go’ can be said to be as a result of her belief that ‘you learn more if you do it yourself’ in addition to her perception of how her behaviour would affect others if she were to ‘pester them all the time’. Trainee 6 is building up her experience as a result of learning from her research on the task, through the carrying out the research and attempting to put down what she thinks it should be, and then ‘checking’ her findings with her supervisor, seeking further advice as she is unable to decide which of the resources referred to is the correct one.

When relating another research task ‘agricultural tenancy’ Trainee 6 refers to Halsbury’s:

Trainee 6 - ‘I had to, some research; it was in relation to something like agricultural tenancy. I’d never done anything like it before ever, so eh, I started, I used Halsbury’s Laws. I used it on the Internet cause obviously they are more up-to-date and then that referred you to different acts and things and then I found a book which actually dealt with agricultural tenancy. And then just went from there (laughs)’ (P78)

Not knowing anything about the subject or task Trainee 6’s first port of call is Halsbury’s, suggesting that Trainee 6 is familiar with this resource and the types of information that it can direct her to. This is further evidenced by:

Trainee 6 - ‘I just know that Halsbury’s kind of deal with everything, so, and even if they don’t answer your specific question, being on the internet you know that they have the update, you know that it is going to be up-to-date or if it is not it says this is about to change or whatever, and it is really easy to access, I mean you can do it from your desk which is really easy.’ (P79)

A range of shaping factors suggest themselves in relation to Trainee 6’s choice of resource; familiarity, belief, currency, referential properties, and accessibility. Trainee 6 believes that Halsbury’s deals with all aspects of the law which suggest that she has used the resource before. In addition, she indicates a preference for the electronic version, feeling it to be current, easy to use and useful in guiding the reader to further resources.

Accessibility of resources, however, also proved to be a potential barrier in relation to Trainee 6 when carrying out research:

Trainee 6 - ‘the thing I find hardest about doing research here is that everyone doesn’t have access to the cases you know, to the Internet cases or All England Reports or whatever, cause at University you just do a search, find the article that you wanted, and it was much easier cause I know if you want to

look for a case and if you don't know the name of it or you don't even know what case it is and you just want one in the general area then I find that harder cause obviously you have got to go and see [librarian], which I mean she is very helpful and very good but sometimes you kind of think, when you are looking for something it's hard to explain to someone else and they can come up with 10 cases which are completely different to what you are actually looking for, I find that hard at times' (P80)

Shaping factors identified in relation to Trainee 6's information behaviour include; 'access', whereas at University Trainee 6 was able to carry out her own searching, within the firm there is the suggestion that access is restricted with a need to go through the librarian; 'perception of resource' and 'tacit knowledge, despite seeing the librarian as helpful, Trainee 6 does not always feel able to express her need. As was found with Trainee 1, there is a suggestion that Trainee 6 would perhaps only know what she wants when she sees it. This could suggest a need to carry out her own browsing or searching, to enable her to recognise what is required, that at the same time as accessing or seeking explicit knowledge Trainee 6 would be bringing to bear her tacit experience. This is further evidence by;

Trainee 6 – 'Ehm it's a lot like oh you know if you were looking for a case, I don't know, for example, something to do with streets and whether it is an adopted highway, and you want to check who is in charge of the drains or who has liability for that, you couldn't, if someone else did the search they could put in highways drains and adopted and get a completely different set of cases or maybe the same 100 cases but they pick out a different 10, to that I'd look and think that's the specific point.' (P81)

Trainee 6 will essentially know what she is looking for when she sees it.

Trainee 6 was also found to be familiar with the government's web site:

Trainee 6 – 'I use the government web site a lot – actually I use it an awful lot the government one' (P82)

However, she suggests that apart from this site she is not too familiar with others:

Trainee 6 – 'and then like Google for searching, but I mean probably not, I don't really know much else apart from, I mean there's like other specific web sites like that always have stuff to do with what you are working with on cause I've been doing some research for a seminar which my supervising partner is doing in a couple of weeks, so I've been searching round all the web sites, you can get some quite good articles of them on current issues and things.' (P83)

This would suggest that in addition to the government web sites, although not necessarily familiar with them initially, she has now learned of others that are useful for her work as a result of carrying out research. When considering how she knew about the sites Trainee 6 again refers back to what she learned at University:

Trainee 6 – 'I was aware of the government ones cause that's the ones I always used at University as well. I mean the other ones, I probably knew that they existed but I, no I have never used them before.' (P84)

Trainee 6 is certain about how she came to know of the government web sites but uncertainty creeps in as to how or whether she knew about the others. This uncertainty is perhaps explained by her approach to the identification of the other sites; this would appear to be as a result of 'browsing'.

Trainee 6 – 'I think I probably just thought oh I'll look at that, I'll see if they have got anything on there or something. I don't think anyone had actually referred me to the Internet' (P85)

1.5.7 Trainee 1 and Approach to Task

Trainee 1 describes a range of differing tasks that she was involved in as she progressed through the seat, but unlike Trainee 5 and Trainee 6, Trainee 1 does not indicate being guided by her supervisor as to how to initially approach any of the tasks. When relating her approach to a task concerning landlord and tenant:

Researcher – ‘although you say that you would know that there is something wrong or it’s not acceptable, how do you know, is it because of your legal training do you think or is it common sense or just your intuition?’

Trainee 1 – ‘It’s probably a bit of everything that you have just said, common sense a lot of the time ehm, I think, yeah, it probably is a lot of common sense. It’s like, you read it and you go no I don’t like the look of that, there’s usually a good reason why you don’t like the look of it. And it’s the same if you are reading a legal clause and you are thinking if I can’t read it and it is not clear I’m not going to allow it to go ahead because if something happened and it went to court blah blah blah – they are going to be sitting saying the same thing and it should never have been allowed to go through. Whereas if it is really clear, really straightforward and you are reading it going yeah okay that’s fair enough, it’s likely to be okay. I think with legal training you get to know sort of, almost like the phraseology really, the way the sentence is structured or whatever, the general clauses that will be in every lease you look at and you know they’ll be there so when you see them, you think alright that’s bog standard and go to the next paragraph because it will be, which is handy to know if you know what it means and you know. So probably bits of everything’ (P47)

A range of shaping factors is suggested by Trainee 1’s account. Trainee 1’s ability to recognise when something is not quite correct suggests that prior knowledge and experience is being brought to bear on the task. Tacit knowledge is being used in relation to *sensing* that something doesn’t look right, to be later validated by explicit knowledge, the reason why it didn’t look right. Trainee 1’s awareness of the need for clarity in an effort to avoid unacceptability in court coupled with her ability to interpret and understand the lease, in addition to understanding how solicitors work, also suggests prior knowledge and experience being brought to bear on the task. Trainee 1 links aspects of this knowledge and experience to her legal training; terminology and general clauses thought to be common to every lease, suggesting that Trainee 1 is familiar, not only with the terms, but with their appropriate use in leases.

Trainee 1 was also found to bring to bear not only a mixture of her experiences from within the firm but her previous experience from University, and when in doubt she refers to another member of the department:

Researcher – ‘And if you didn’t know what a legal clause meant or a phrase or any legal terminology what would you do?’

Trainee 1 – ‘Well we have got a good library here so you can find out but time is not on your side usually (laughs) and you cannot be sitting in the library for an hour so normally I take a good guess at it (laughs). I have got sort of my files and things from Uni and so I do try my best to find out what it’s about or at least a general sort of, get the jist of this, ehm, usually you can figure it out but if you really can’t and you’ve tried, I usually do try and if I can’t I go and see the guy who gives me landlord and tenant stuff and say what does this mean?, you know, and he’ll just sit down and go through it with me, say look if you see this again, if it is put by this, this is what it means. Which is really, really good, cause it does stick in your head that way and then when you come across it again you go oh yeah.’ (P48)

As with Trainee 5 and Trainee 6, Trainee 1 prefers to attempt the task herself prior to seeking help from another member of the department, however, through her approaching an appropriate member of the department, Trainee 1 is also emphasising how she is learning. Trainee 1, like Trainee 4 highlights ‘time spent in library’ as a shaping factor. Despite her perception of the library being ‘good’, Trainee 1 perceives that long periods of time spent in the library is not acceptable, justifying this through her suggestion that ‘time is not on your side’. However, it is interesting to note that Trainee 1 ‘takes a good guess’ and notes that she refers back to her files from University, suggesting their use as a reference point. Does this suggest that the library is not as ‘good’ as first suggested? Or does it imply that as a result of her perception that time spent in the library is not acceptable, she resorts to her notes from University? Perhaps it is simply that Trainee 1 is more familiar with her notes from University, than with the contents of the library? Whatever the reason, this perception of what is acceptable clearly shapes the trainee’s behaviour.

Although Trainee 1 has access to a more experienced trainee, and indeed has used this trainee in terms of support;

Trainee 1 – ‘when you first start, it’s a contact point, it’s somebody of a similar age of a similar position that if you felt, I don’t know, that you couldn’t cope - You’ve got someone who is on your level, that’s on your wave length, who you know has been there and is a trainee and knows what you are talking about.’ (P34)

Trainee 1 notes however that due to the approachability of staff in the department she has not had cause to use this trainee for advice in relation to tasks:

Researcher – ‘And would you use him [trainee] for advice on an aspect of a task you are working on?’

Trainee 1 – ‘the department I’m in is very friendly, very approachable and there’s a lot of people that I know now that I can go to and say what am I doing and they will tell me. I think if maybe I was in a more formal, for want of a better word, and I felt that I couldn’t just knock on the door and say have you got two minutes then maybe I would. But the problem is – I can just hammer on the door and say have you got 2 minutes’ (P49)

This would suggest that approachability of staff can shape how trainees approach tasks.

Key shaping factors identified in Trainee 1’s approach to tasks are; ‘tacit knowledge’ (sensing), ‘education’ (legal training), ‘working knowledge’ (understanding how solicitors work), ‘perception’ (of time spent in library, of learning), ‘approachability’ (of solicitors), ‘guidance’ (solicitors) ‘individual approach’ (attempts the task herself).

1.5.8 Trainee 2 and Approach to Task

Due to Trainee 2’s prior experience in Property, as discussed earlier, Trainee 2 has carried out a range of tasks from what she considers typical trainee tasks, such as the drafting of leases, to those where she is given more responsibility;

Trainee 2 – ‘We act for the Church so I’ve done a few residential purchases and sales for them in relation to properties that they have, and that is quite interesting because all the deeds are absolutely ancient so they are all pre-registration. So that is always quite difficult to get your head round. [and] You have to just read all the old documents, so there maybe ones dating back to 1800s and you have to try and read the old conveyances and figure out which piece of land is the bit of land that is in question because usually it is from a much bigger bit of land than you are actually selling on. [and] On title documents there are usually restrictive covenants that prevent you doing certain things and things like that you have to report to the Church and give them to the purchaser so they can have a look through it.’ (P50)

Trainee 2’s approach, the reading of the documents and the identification of appropriate pieces of information, is indicative that Trainee 2 is bringing both knowledge of the task itself and knowledge of how to approach the task. Unlike Trainee 5 and Trainee 6, who were both initially guided as to what to do, Trainee 2, like Trainee 1, directly links knowing what to do with her learning from Law School and University:

Researcher – How did you learn what you were supposed to be looking for?

Trainee 2 – ‘You get taught it at Law School and at university you learn the theory of it at university, you learn that there are such things as restrictive covenants that will bind the land and any future purchasers, but it was basically at Law School that you see what it would look like. But obviously you get numerous different kinds and you have to be able to identify which type it is. So it was mainly at Law School and the, obviously when I started as well, the more you see of them ... at Law School you can’t see that many of them, you are not going to sit there and look through loads of old titles. So it was just a case of getting familiar with them and then if I didn’t know how to identify certain things I would go and check, but you just sit and look through it basically.’ (P51)

This suggests that Trainee 2 is bringing to bear not only her experiences, her learning from University, Law School and the firm, but her tacit knowledge to the task developed through an increased familiarisation with differing forms of covenants.

Key shaping factors identified in Trainee 2's approach to tasks are; 'working knowledge' (reading of covenants etc) 'education' (law school), tacit knowledge (developed through familiarisation), 'guidance' (to go and check), 'individual approach' (attempt task herself)

1.5.9 In Summary

Within the key theme 'approach to tasks' a number of emerging shaping factors are identified; 'guidance', 'resources', 'working knowledge', 'individual approach'

1.5.9.1 Guidance

Evidence suggests that guidance, in its various formats, helps shape the knowledge behaviour and the knowledge development of the trainees. This is not unexpected as the trainees are learners and as such are likely to need guidance as to what to do and ideally will learn from that guidance. Guidance was found, however, to vary in approach and depth, and the information behaviour and knowledge development of the trainees as a result of guidance was found to be influenced by a range of further shaping factors.

For some trainees guidance in the form of direction was offered at the beginning of the task, for example, trainee 5 was directed to 'ring' to see if they were ready to exchange, Trainee 6 and Trainee 2 (CL) were directed to read relevant documents and Trainee 1 (CL) was directed through 'discussion' with her supervisor. This initial guidance, however, often only suggests where the trainee should start and does not necessarily suffice for learning how to approach the task as a whole. For example, Trainee 5, although guided as to what to do initially, then found herself in charge of the file and in need of further guidance, to learn what to do. This further guidance was sought, not only from her supervisor, but through discussion with the client. Through approaching her supervisor and through discussion with the client the trainee is seeking further guidance in the shape of information on the case, and knowledge as to how to proceed with the case. This seeking of further guidance enables the trainee to identify what to do next and the trainee is therefore learning, developing her knowledge as a result of her information and knowledge seeking approach to the task. In addition, Trainee 5 was also found to be guided by the file itself, through reading the file she was able to decide, to learn what needed to be done. However, reading as a form of guidance or learning was not always found to be fruitful. Trainee 2 (CL) notes being guided to read documents, to help familiarise her with the task, however, these documents consisted of '*about 30 lever arch files*', and led to a perceived inability to take it all in. Trainee 2 (CL) suggests that rather than learning about the task through the reading of materials, it was the actual '*doing practical things on it*' that better enabled her to learn. This is perhaps also indicative of this trainee's preferred mode of learning. From the above it can be posited that in some instances the initial guidance as to how to approach the task is insufficient in itself in developing knowledge of how to approach a task and to learn from that task, requiring, for example, additional guidance through further knowledge and information seeking to find out more about what to do on a task. In addition, guidance to read about the file can on its own prove insufficient for learning about a task, and in this instance, required supplementary 'learning by doing'.

In contrast, whereas Trainee 2 was provided with guidance whilst in Commercial Litigation, as noted above, perhaps because of her prior experience in Property, is given more responsibility, and as a result, there is no indication that she was directed as to how to commence the task.

Guidance in the form of feedback was found to potentially have both a positive and a negative outcome on the trainees' behaviour in their approach to tasks. Positively, feedback in the form of scribbles on work returned to Trainee 3 suggests the potential to learn from these, and to approach the task differently in the future. These scribbles, by their very nature illustrate where the trainee has gone wrong and as such could have a negative influence on the trainee, however Trainee 3 seemed to take a more positive stance; as the scribbles become fewer this demonstrated to her that she was getting better. Verbal feedback from Trainee 2's (CL) supervisor encouraged her to reflect on what she could/should have done, that is, to check with the court. Despite justifying to herself that it was because of the urgency of the matter that she took the approach she did, it is likely that she will review this approach in the future, seeking further information rather than relying on what she thinks is correct. Feedback was found to have both a positive and a negative influence on trainee 4's knowledge and information seeking behaviour. On the one hand reflection on the feedback received alerted him to the need to ask questions at time of instruction, thereby learning to seek further knowledge and information

at time of instruction. But on the other hand, this feedback, perhaps due to the nature of the feedback, *'you shouldn't have come back to me then'*, resulted in his feeling reluctant to return to solicitors for further guidance on future tasks, preferring now to approach other trainees, and as such has potentially shaped his knowledge seeking behaviour in a negative way, stopping him seeking guidance from those from whom he could learn most. From these examples it is clear that the form and tone of the guidance and how it is perceived by the trainee can potentially shape their future approach to tasks, their knowledge seeking behaviour and their knowledge development.

Initial guidance was communicated via a memo or via face-to-face instruction. A memo could contain written instruction regarding the task and an indication of where to start. Face-to-face instruction offers the potential for the trainee to seek clarification of the task and how to approach it then and there. Interestingly, in the examples narrated by Trainee 4, although both formats of instruction offered guidance as to which resources to use, with the exception of 'statutes', a resource likely to be familiar to both trainee and solicitor, the rest are general in nature; books, Internet, and as such this does raise the question as to whether the solicitors know specifically where the trainees should look. Guidance, in this instance, is potentially not very helpful and relies on the trainee to already know where to look or to make the effort to find out where to look, thereby shaping their knowledge behaviour and knowledge development.

The seeking of guidance when receiving instruction via memo can require the trainee, when in doubt, to go back and speak to the solicitor who gave the memo or to seek guidance from others. A face-to-face situation requires the trainee to ask at the time of receiving instruction or, when in doubt as a result of attempting the task, to go back and speak the solicitor or to seek guidance from others. 'Perceived knowledge', 'perception that somebody will know', 'approachability', 'effort' and 'acceptability' are identified as potential shaping factors. Trainee 3 is selective about who she approaches, perceiving that not everyone will know something about the tasks she is undertaking. Trainee 1 (CL), despite not always being initially successful at identifying someone who can help her, still perceives that 99% of the time there will be someone who can help guide her as to where to start, and as a result of that perception, where unsuccessful, continues to ask around in her belief that this will ultimately save her time. Trainee 4 suggests that as the other trainees are likely to have carried out similar tasks, they are potential sources for guidance as to how to approach tasks. Trainee 6 suggests that the department is *'very friendly'* and *'very approachable'* and feels that she can approach anyone for guidance. Trainee 4, despite having the opportunity to seek further guidance on the task and the resources to be used at point of instruction does not make the effort to do so. Not making the effort could be as a result of his newness to the seat and unfamiliarity with that area of law. As noted above, as a result of feedback Trainee 4 now considers that it might be perceived as *'unacceptable'* to go back and seek further guidance from the solicitors.

1.5.9.2 Resources

Evidence suggests that people play a key role in the work world of the trainee. Linked to the seeking of guidance above, people were found to be key information and knowledge development resources when undertaking tasks. When within Commercial Litigation, Trainee 1 and Trainee 2 were found to use their supervisors and when within Property, Trainee 1 notes that she can approach anyone in the department and Trainee 2 suggests, when in doubt, going back to check but does not indicate with whom. Trainee 4 used one of the partners and the other trainees. Trainee 3, unlike the other trainees, is not sitting with a supervisor and as such consults with another trainee. Trainee 5 consulted both her supervisor and her client, Trainee 6 her supervisor and one of the other partners.

'Belief', 'time', 'perceived knowledge', and 'approval' are shaping factors. Trainee 1 (CL) believes that the best approach is to ask others as it saves time; Trainee 3 chooses a certain trainee as she perceives that they will know more because of time served; Trainee 2 (CL) turns to her supervisor for approval of her work and Trainee 4 to the trainees as he believes that many will have undertaken similar tasks and will therefore have knowledge of these tasks. Trainee 4, like Trainee 1 (CL), also suggests that his preference is, where possible, to ask someone.

Acceptability of time spent on browsing resources in the library was found to influence the trainees' approach to tasks. Both Trainee 4 and Trainee 1 suggest 'time' as a shaping factor. For Trainee 4, to spend time browsing for the information needed is suggested as time wasted. Trainee 1 perceives that there is insufficient time available to spend it browsing resources in the library to find the information

required. Both trainees as a result of this perception, having spent what they perceive as an acceptable amount of time browsing, opt for a differing approach, Trainee 4 opts, where possible, to go back and seek further guidance by asking, and Trainee 1 consults her files from University or seeks further guidance by asking.

The trainees were found to use a mixture of resources combined with tacit knowledge. For example Trainee 5 uses her tacit knowledge; *'knowing things herself'* in addition to the file. Trainee 6, notes that she *'did it like that cause I think that'* in addition to utilising published resources. Trainee 1 *'senses'* that something doesn't look right and makes *'a good guess at it'* in addition to using resources in the firm and resources kept from her University days.

1.5.9.3 Working knowledge

Evidence suggests that knowing what to do when working on a task can be partially attributed to the trainees' academic legal education. Trainee 2 (CL) attributes her knowledge of the procedures of the civil procedure practice rules to her time on the Legal Practice course; Trainee 1 (P) refers to her files from University; Trainee 1 was also found to link aspects of her knowledge and experience to her legal training; identifying this training as providing her with a knowledge of the appropriate phraseology and the types of clauses typically found in leases; and Trainee 2 (P) attributes her knowledge of restrictive covenants and what to look for in deeds to her time at University. In contrast, despite Trainee 3 recognising her experience of knowing how to use the Internet from Law School, she does not acknowledge that experience as having taught her much, but as she considers that the training provided by the firm did not teach her anything new, then it can be posited that she did indeed learn more at University than she is able to recognise.

Knowing what to do when working on a task was however not always attributed to legal education. Having said this, instances of seemingly knowing what to do would seem to suggest that prior experience, either from University or from their time within the firm or through a combination of both has contributed to how the trainees approach tasks and their knowledge development. For example, Trainee 1 (CL) demonstrates her knowledge of the relevant Act and as such is bringing prior knowledge to the task in hand. She must have learned about the Act from either her time at University or in the firm and has potentially built up her knowledge of the Act as a result of both experiences. Trainee 5, as she takes charge of the file is able to identify at what stage the file is at and what needs to be done next, indicating knowing what to do and as such must be bringing prior experience to the task. Trainee 1's (P) ability to recognise when something is not quite correct suggests that prior knowledge and experience is being brought to bear on the task. Trainee 2 was found to acknowledge a combination of education and firm experiences in informing her practice. Her knowledge of litigation procedures was as a result of the Legal Practice course and she was found to be using a mixture of that knowledge with knowledge acquired from working with the White Book in the firm with knowledge *'picked up'* through experience of working within the firm. Trainee 2 is potentially, therefore, bringing to bear a mixture of tacit and explicit knowledge in order to complete the task.

1.5.9.4 Individual Approach

Evidence suggests, albeit tentatively, that there is a potential difference in individual approach between the two seats. Whereas all trainees in Property were found to suggest that their preference was *'to have a go'* themselves prior to seeking guidance, asking around appears to be an element of work within Commercial Litigation. For example, within Property, Trainee 6 and Trainee 1 suggest that when given a task they will *'have a go'*, doing as much as they can before going back to seek advice from a supervisor or member of the team. Trainee 5, as she takes charge of the file is able to identify at what stage the file is at and what needs to be done next, and only where uncertainty arises whilst working on the task does she go back to her supervisor. Trainee 2 was found to be immersing herself in the task through the familiarisation with, and reading of, the documents and using her knowledge acquired as a result of her learning at University, Law School and the firm, to make sense of the documents, to *'identify'* and *'figure out'* what is appropriate, and where uncertain checks with another member of the team.

In Commercial Litigation, Trainee 1 appears to prefer to ask around as a result of her belief that there will be someone out there who can direct her as to where to start on a task. Trainee 4 was also found to

seek help from the other trainees who had experience of Commercial Litigation. This can perhaps be explained by the culture of Commercial Litigation where discussion is common between the trainee and the supervisor as highlighted in 1.3.7 above, and as a result of this discussion culture, Trainee 1 and Trainee 4 are happy to ask around. It could of course, also be due to personality but given the different behaviour of Trainee 1 who is found in both Property, where she indicates 'having a go' herself, and in Commercial Litigation, where she asks around, this would not suggest that it is as a result of personality. This notion of cultural discussion is in itself inconclusive evidence however, as neither Trainee 2 nor Trainee 3 indicates asking around to the same extent as Trainee 1 and Trainee 4. In addition 'asking around' is not necessarily the same as discussion.

Whichever approach the trainee takes it is likely to contribute to their knowledge development. Asking around, although not necessarily suggesting discussion, will still inform the trainee as to where to look or who to approach, thereby offering the potential for the trainee to build up their own knowledge of resources. Tackling the task themselves offers the trainees the opportunity to learn by doing.

In the above summary the trainees were found to potentially prefer to ask or to tackle the task themselves prior to seeking guidance, both offering the potential for knowledge development. Guidance was however found to be both general and specific with the potential to positively or negatively influence the trainees' approach to tasks and therefore their information behaviour and knowledge development. In addition to their own experience being brought to bear on a task, key resources were identified as people. Guidance from people as to information resources was found to be variable in usefulness suggesting the need for the trainee to already know within which information resource to look, or to seek further guidance from 'people' as to the answer or where to look, or to identify information resources themselves. This concept of 'knowing' where to look, or 'finding out' where to look is key to capturing the information seeking behaviour of the trainees in more detail and as such is explored further below.

1.6 How do the trainees identify and use resources in carrying out the tasks they have been allocated?

Building on section 1.5, through exploring how the trainees come to know what resources to use and how they use them is revealing in terms of their information behaviour and knowledge development.

Trainee 3 and Trainee 1 specifically mention accessing specialist databases over the Internet. Although Trainee 3 is aware of the resources available she does not differentiate between the specialist database resources of Westlaw and LexisNexis and the Internet. Ease of accessibility of the books, being on the floor where she is situated, and increased familiarity with the electronic resources, as suggested by her use statement, are affecting factors, in addition to time saved through accessing these databases and currency of the information found. Accessibility and ease of use were further highlighted as affecting factors in Trainee 3's growing preference for the use of specialist legal databases over the Internet. (Knowledge acquisition – knowledge of resources and perception of resources)

For Trainee 1, affecting factors in her use of specialist databases are; ability to retrieve a range of items at once; perception of resource and time saved. Trainee 1 was also aware that databases are not comprehensive in themselves, as indicated by her suggested pulling together of information obtained from the use of three databases. Trainee 1 also suggests that the databases will miss things and as such cannot be relied upon as they are incomplete. For Trainee 1, their advantage is their use of summaries to more easily and quickly aid in the identification of relevant material. Trainee 1 was found to be implicitly evaluating the resources as regards their content. (knowledge acquisition – perception of resources)

Trainee 2 was also found to be evaluating resources, in deciding whether to use them or not; recognising the disadvantages of searching the Internet; perceiving the information found to be unreliable. (knowledge acquisition – perception of resources)

Trainee 4 was not aware that he had access to the Internet and therefore the specialist databases from his desktop as a result of misinformation. Motivation to satisfy an information need led to its discovery. (Knowledge acquisition – knowledge of resources)

Trainee 1 and Trainee 2 also link their knowledge of resources to their time in education and to their time in the firm. The White Book is the key resource for civil litigation. Trainee 1, however, on entering litigation needed to be reminded of the resource, and suggests that this unfamiliarity was due to a lack of use whilst at University. Trainee 2 adds further evidence to support this, indicating that as a trainee, they are required to refer to the resource in much more detail, which suggests that it was not used in any great detail at University. A referential memory of the need to use the resource for work within litigation was identified by Trainee 1; that work within litigation requires reference to the White Book to become second nature.

(knowledge acquisition – knowledge of resources)

Kuhlthau (2001:32) found in her study of lawyers that ‘all eight lawyers interviewed expressed a preference for print texts over computer databases for more complex tasks’. For Trainee 1, the choice of resource format, print or electronic, was found to be affected by type of search. Trainee 1’s need to browse a resource, rather than approach the resource with a known need, impacted on her choice. For Trainee 1 it is easier to browse through pages in a book than browse through pages on the Internet. Although the White Book is available electronically and despite the obvious praise that the trainees have for the electronic resources, Trainee 1 suggests that it is the print version that is heavily used by all in litigation.

(knowledge acquisition – perception of resources)

With a known-item need, Trainee 2 demonstrates an awareness of how the library as a resource is organised in addition to the resources held.

(knowledge acquisition – knowledge of resources)

Some studies have suggested that many lawyers dislike legal research and prefer to farm it out to students and junior lawyers; others have noted that lawyers are often unwilling to delegate information-retrieval activities, since often they do not know exactly what piece of information may be crucial (Leckie, Pettigrew & Sylvain, 1996). For all trainees, the librarian was considered as a resource. For Trainee 3 the type of research influences whether Trainee 3 carries out the research herself or passes it to the librarian; claiming to be proficient herself at case research. Both Trainee 1 and Trainee 2 praise the librarian as a resource for help but both perceive her to be very busy and as such this impacts on their use of this resource. Affecting factors identified by Trainee 1 are; a perception that the acceptable behaviour is to carry out the research herself; perceived busyness of librarian and access to facilities. Trainee 1 also perceives it to be easier to undertake her own research as she finds it hard to explain to someone else what she requires, she is not fully able to express what she requires. This suggests that at the same time as accessing or seeking explicit knowledge Trainee 1 is bringing to bear her tacit experience. For Trainee 2; time available to do the research herself; perceived expectation of supervisor that she should carry out the research herself; perceived acceptable behaviour, to pass on the research or not; accessibility, ease of access to the solution; knowledge of the task and where to go for the solution; easier and quicker to do it herself if required then and there; and busyness of librarian. Time to do the research was also highlighted by Trainee 3. However, whereas Trainee 2 initially suggests that she would pass on most of the research to the librarian unless she knew where to find the solution, she also suggests that passing research to the librarian would depend on whether the case was urgent, in which case she would carry out the research herself. In addition she is also intimates that she would carry out the research herself to ensure that the correct information was found. This could suggest a lack of trust in the librarian as a resource. Senge (1990) suggests ‘one will act differently to someone who one perceives or sees as untrustworthy when compared to someone one sees as trustworthy’. However, it is more likely that Trainee 2, in an effort to ensure that the correct information is found, and found quickly, feels the need to trust in her own judgement, to take responsibility for finding the correct information. Trust in others in relation to finding the correct information is further emphasised by Trainee 2 where she suggests that as she becomes more experienced the carrying out of her own research will be weighted against trust in others, cost effectiveness and efficiency. Trust is clearly an affecting factor in deciding whether to farm out research or not. However, it will also depend on the resources available to Trainee 2 once she is qualified, as a newly qualified she will not necessarily have a trainee that she can ask to do research and it could simply be a choice between her and asking the library. Trainee 4 also highlights the potential for using the librarian but in the context discussed Trainee 4 perceives that the librarian may or may not know. In addition, it would have required effort on Trainee 4’s part to find out if she did.

(knowledge acquisition – perception of resources)

Both Trainee 1 and Trainee 2 used their supervisor as a resource. For Trainee 1 affecting factors were; busyness of supervisor; and ease of accessibility, sitting in the same room. For Trainee 2 affecting factors are; relationship with, and personality of supervisor; time saving and easiness, to go back to the supervisor; accessibility, sitting in the same room; and situation, if the task is for the supervisor with whom she sits.

(knowledge acquisition – perception of resources)

The type of task and preference of trainee was found to influence the approach taken by the trainees.

Trainee 1's preference is to seek direction on the task from other solicitors in the department, noting that, if she asks around, 99% of the time someone will be able to point her in the right direction.

Trainee 2 notes her first port of call as the library, however, where the task involved the need for know-how and experience then she was found to approach another, more experienced trainee. Trainee 2's use of others supports Hildreth & Kimble's (2002) epistemology that 'the learner actually develops their own tacit knowledge by becoming immersed in the practice itself, under the guidance of a mentor and whilst situated in a particular environment'. Trainee 2 is utilising the knowledge and experience of another member of staff to help further her own understanding of what should be included, excluded, in the task that she is undertaking. When faced with a known-item need Trainee 2 demonstrates knowledge of how the library is organised. Affecting factors for Trainee 2 in selecting resources for use are; perception of resource (bibles); resource content (e.g., guidance leaflets); and level of information (aimed at the layperson). Trainee 4 is either guided to the general types of resources he could refer to or is left to start from scratch himself. When uncertain as to where to start, Trainee 4 was found to browse resources in the library. According to Ellis (Wilson, 1999) browsing is one mode of searching; semi-directed searching in an area of potential interest. Affecting factors were; time spent on browsing and perceived acceptability of spending time on this activity. Trainee 1 was also found to restrict the time spent on research. Affecting factors are; perception of acceptability of time spent researching; urgency and opportunity. This perception of 'acceptability' is perhaps indicative of the 'culture' of the department. Culture is said to represent the behaviour patterns or style of an organisation (Kotter and Heskett (Wilson, 2001:355) and as time is of the essence in the work of solicitors due to their billing procedures, this perception that spending too much time on research or in the library is inappropriate, is perhaps related to efficiency and effectiveness, that too much time spent in the library is viewed as not working efficiently and effectively. Having browsed the library, Trainee 4 refers to the other trainees in the firm, confident that the first year trainees will be able to help him, although slightly uncertain about the second years, as he does not know them as well as the first years. Affecting factors are; confidence; relationship; and prior experience.

(knowledge acquisition – perception of resources)

Trainee 3 and Trainee 2 link their knowledge of how to use the resources to their time at Law School and through trial and error in their use. Trainee 3, unlike Trainee 2, also links her knowledge to time spent in the firm. Further affecting factors influencing Trainee 3's knowledge of how to use the resources are frequency of use and observation. In addition, as Trainee 3's knowledge of searching improves her use of web-based resources increases. A further affecting factor in Trainee 2's case is familiarity with the software. Unlike Trainee 3 and Trainee 2, Trainee 4 has had no training in searching the Internet, but similarly to Trainee 3 and Trainee 2 he is learning how to search by trial and error.

(knowledge acquisition – knowledge of resources)

Prior experience in other departments was identified as influencing knowledge of resources. Trainee 1 suggests that the three seats, litigation, property and private client can be linked by the work they carry out, with cases potentially overlapping the three seat areas. Trainee 1 has already worked in Property which helps explain her knowledge of the people resources available there.

(knowledge acquisition – knowledge of resources)

Appendix 7

Audit Trail

The Audit Trail ¹

Audit Trail Classification	File Types	Evidence
1. Raw data	A) Electronically recorded materials: Tapes and transcribed interviews B) Field notes: Interview records Meeting Records Reflection Records	a) dialogue of social interactions; tape recordings and transcripts b) Researcher journals c) Supervisory meeting notes d) Peer discussion
2. Data reduction and analysis	A) Write-ups of field notes: Description B) Theoretical Notes: Themes Ideas Concerns Concepts Hunches	a) Coded Transcripts b) Open coding c) Axial coding d) Selective coding e) Initial analysis of individual cases plus links to literature f) Initial cross case analysis within seat of training plus links to literature g) Reflection in researcher journals h) Peer discussion i) Electronic records of ideas, e.g., attempts at mapping of themes j) written records exploring ideas in researcher journals
3. Data reconstruction and synthesis	A) Categorical structure: Themes Relationships B) Findings and conclusions: Interpretations Inferences C) Final Report: Connections to existing literature Integration of concepts, relationships and interpretations	a) Cross case and cross seat analysis, discussion, interpretation and links to literature b) Development of synthesised characterisations and memos c) Diagrams d) Model of Behaviour e) Theoretical propositions f) Final thesis
4. Process notes	A) Methodology Procedures, routines, strategies B) Trustworthiness Credibility Dependability Confirmability	a) Researcher Journals b) Electronic records c) Supervisory meeting records d) Peer debriefing e) Member checks f) Prolonged engagement g) Triangulation checks

¹ Audit trail based on Lincoln and Guba (1985:Appendix A